

**BEFORE THE**

**PUBLIC SERVICE COMMISSION OF WISCONSIN**

Investigation Into Ameritech Wisconsin's  
Unbundled Network Elements

6720-TI-161

**AMERITECH WISCONSIN'S SUBMISSION  
OF SYNOPSES OF TESTIMONY AND  
PROPOSED FINDINGS OF FACT  
AND CONCLUSIONS OF LAW**

**PUBLIC VERSION**

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Wisconsin Bell, Inc. d/b/a Ameritech Wisconsin ("Ameritech Wisconsin"), by its counsel, submits its Submission of Synopses of Testimony and Proposed Findings of Fact and Conclusions of Law to AT&T Communications of Wisconsin, Inc., WorldCom, Inc., Rhythms Links, Inc., TDS Metrocom, Inc., Time Warner Telecom, L.P., and McLeodUSA Telecommunications Services, Inc. (hereinafter referred to as "the CLECs" or "the CLEC Coalition").

- I. Development of Cost Study Principles and Requirements Issues Consistent with 47 U.S. § 252(d):**
  - A. What are the appropriate principles and requirements to be used to develop cost studies pursuant to 47 U.S. § 252(d) and relevant State Law?**
    - (1) What are the differences between the TELRIC and TSLRIC methodologies and how or when should the methodologies be applied in the determination of UNE prices?**

**SYNOPSIS OF TESTIMONY**

William Palmer explains the underlying economic principles of the TELRIC pricing and the methodology used by Ameritech Wisconsin to create its TELRIC studies. Tr. Vol. 2 at 676-686 (Palmer Direct). ✓

1. The FCC in its *First Report and Order*<sup>1</sup> and accompanying regulations has established the “principles and requirements” that are to be used to develop cost studies and establish rates for UNEs and interconnection. These principles and requirements have been dubbed the TELRIC (which stands for Total Element Long Run Incremental Cost) methodology. AW Init. Br. at 2.

2. In preparing the cost studies that have been submitted in this proceeding, Ameritech Wisconsin asserts that it has adhered to the TELRIC principles and requirements – albeit “under protest.” Tr. Vol. 2 at 893-95.

3. The reason for the “protest” is that Ameritech Wisconsin believes that TELRIC is unlawful. Specifically, Ameritech Wisconsin believes that the 1996 Act and the U.S. Constitution together require that UNE rates (1) fully recover Ameritech Wisconsin’s historical costs (*i.e.*, costs that it has actually incurred); and (2) be based on the costs of providing the piece parts of Ameritech Wisconsin’s actual real world network. Accordingly, it is Ameritech Wisconsin’s position that both of TELRIC’s bedrock principles violate the Act. *Id.*; *see also* AW Init. Br. at 4.

4. Ameritech Wisconsin believes that its position on these points will be fully vindicated in the pending Supreme Court case in which that Court will decide once and for all (1) the lawfulness of each of TELRIC’s core principles; and (2) the meaning of the Act’s pricing provisions and what they require, what they mandate, and what they permit and prohibit. *See Iowa Utils. Bd. v. FCC*, 219 F.3d 744 (8<sup>th</sup> Cir. 2000), *cert. granted* 121 S.Ct. 877 (Jan. 21, 2001)

new rules are in place, this Commission will need to reopen this proceeding and reset rates in conformity with the Supreme Court's decision and the FCC's new rules. AW Init. Br. at 4-5.

5. The "issues list" prepared by the Commission's Staff to serve as a blueprint for the parties' briefs also inquires about TSLRIC (which stands for Total Service Long Run Incremental Cost). The bedrock costing principles of TELRIC and TSLRIC are, at least superficially, essentially the same: Costs are to be forward-looking rather than actual historical costs, and the carrier that provides the service (in the case of TSLRIC) or element (in the case of TELRIC) is assumed to operate a network that is optimally configured from an efficiency standpoint, and that employs on a 100% basis the least cost, best currently available technology. (This latter super efficiency principle is commonly referred to as the hypothetical network standard.) AW Init. Br. at 3.

6. But there the similarity ends. TSLRIC and TELRIC have very different purposes and apply to very different things. TSLRIC applies to services; it is used to establish price floors for competitive *retail* services. TELRIC on the other hand applies to network elements; it is used to set rates at which CLECs may purchase at *wholesale* the use of discrete network facilities and functionalities that are owned by the incumbent local exchange carrier ("ILEC"). The "number" established by TSLRIC is intended to prevent predatory pricing; it is not intended to be a sales price; more specifically, it is not required to be a number at which a product or service must be sold; and it does not have to be a sales price that ensures a constitutionally required fair return to the seller. The "number" established by TELRIC on the other hand *is* intended to be a



7. This proceeding addresses and is intended to establish rates for unbundled network elements (“UNEs”) to which Ameritech Wisconsin is required to provide access to competitive local exchange carriers (“CLECs”) by the Telecommunications Act of 1996, Pub. L. 104-104, 110 Stat. 56 (1996), codified at 47 U.S.C. § 151, *et seq.* AW Init. Br. at 1.

8. Because the subject matter of this proceeding is UNEs mandated by the 1996 Act, the Act’s UNE pricing provisions – in particular 47 U.S.C. §252 (d)(1) – govern exclusively the determination of these rates. *See AT&T v. Iowa Utilities Board*, 525 U.S. 366, 378 n.6 (1999) (holding that “[w]ith regard to the matters addressed by the 1996 Act,” the federal government has “unquestionably . . . taken the regulation of local telecommunications competition away from the States”). AW Init. Br. at 1-2.

9. Moreover, the FCC has the sole authority to issue rules and regulations implementing the pricing provisions of the 1996 Act. *AT&T*, 525 U.S. at 378 n.6 & 379 (while the Act “unquestionably” denies States the power to regulate matters addressed by the Act, the Act “explicitly gives the FCC jurisdiction to make rules governing matters to which [it] applies”). AW Init. Br. at 2.

10. Therefore, where the FCC has spoken, this Commission’s task in this proceeding is to apply what the FCC has said. And where the FCC has not spoken, the Commission’s task is to apply the Act. Thus, there are no “gaps” for state law to fill. With respect to UNE pricing, this Commission must either apply § 252(d)(1) directly, or, where the FCC has interpreted § 252 (d)(1), apply the applicable FCC regulations. AW Init. Br. at 2.

this proceeding. We recognize that Ameritech Wisconsin submits its studies under protest, and we take no position on the pending challenge to the TELRIC methodology. Whatever the Supreme Court decision is, it will be binding on this Commission, as will the new FCC rules implementing that decision. If the Supreme Court throws out TELRIC, we will reopen this proceeding to determine if the rates we set now will need to be modified.

12. Finally, we agree with Ameritech Wisconsin that there are significant differences between TELRIC and TSLRIC. TSLRIC is not intended to be a sales price and there is no guarantee that it will be high enough to ensure recovery of the seller's costs and an adequate return on the seller's investment, as required by the 1996 Act. Accordingly, even if the Act and the FCC's implementing regulations and orders did not preempt application of state law, TSLRIC still would not have any place in this proceeding. AW Init. Br. at 3-4.

**B. General issues**

**(1) Cost of Capital**

**SYNOPSIS OF TESTIMONY**

Dr. William Avera testified regarding Ameritech Wisconsin's proposed cost of capital. *See* Tr. Vol. 4 at 1301-06 (Avera Direct); Tr. Vol. 4 at 1307-12 (Avera Rebuttal); Tr. Vol. 4 at 1297-300, 1313-15 (Avera Additional Direct and Cross). ✓

**PROPOSED FINDINGS OF FACT**

13. Ameritech Wisconsin proposes a cost of capital of 12.19%. *See* Tr. Vol. 4 at 1303; AW Init. Br. at 5.

14. Dr. William Avera has prepared a study supporting Ameritech Wisconsin's proposed cost of capital. *See* Ex. 34; AW Init. Br. at 5-6. This study develops conservative

Poor's Corporation, and utilizes this average to generate the 12.19% figure. *See* Ex. 34; Tr. Vol. 4 at 1303; AW Init Br. at 6.

15. The proposed rate is lower than that approved by the Commission in Case No. 6720-T1-120: 13.60%. *See* AW Init Br. at 6. State commissions in Connecticut and Nevada have approved comparable rates based on this study. *See id.*; Tr. Vol. 4 at 1299, 1304.

#### **PROPOSED CONCLUSIONS OF LAW**

16. The Commission adopts the 12.19% cost of capital proposed by Ameritech Wisconsin. Tr. Vol. 4 at 1303; AW Init. Br. at 5. We note that the CLEC Coalition chose not to challenge the Ameritech Wisconsin proposal whatsoever. We decline to apply Staff's proposed use of interest coverage as a substitute for market value capital structure.

- (a) **What percentages of debt and equity should be used in determining the weighted cost of capital that is incorporated into the annual cost factors in the models?**

#### **SYNOPSIS OF TESTIMONY**

*See supra* at Section I.B.(1).

#### **PROPOSED FINDINGS OF FACT**

17. The Ameritech Wisconsin study relies on the capital structure of a number of comparable local exchange carriers to develop the market value capital structure of 86% equity and 14% debt. *See* Ex. 34 at 18-19; Ex. 35; AW Init. Br. at 6.

18. Market value capital structures for these comparable local exchange carriers have been less volatile than those based on book values over the last five years. Tr. Vol. 4 at 1309; Ex. 35; AW Init. Br. at 7.

these diversified companies; it moderates the impact of individual businesses on the whole enterprise.” Tr. Vol. 4 at 1310; AW Init. Br. at 7.

20. Ameritech Wisconsin’s actual interest coverage (for existing debt and interest obligations on that debt) under the 86:14 capital structure is **[Begin Conf\*\*\*\*\*End Conf]** times. *See* Ex. 36C; AW Init. Br. at 7. Staff’s proposed capital structure (roughly 55% equity and 45% debt) would provide interest coverage of only 4.64 times. *See id.*

21. Ameritech Wisconsin currently possesses an S&P AA bond rating. *See* Tr. Vol. 4 at 1312; AW Init. Br. at 8. Staff itself concedes that its proposed capital structure and debt:equity ratio would generate debt service obligations that would render Ameritech Wisconsin unable to maintain even an A rating. Tr. Vol. 12 at 4379.


#### **PROPOSED CONCLUSIONS OF LAW**

22. The Commission adopts the market value capital structure utilized in the Ameritech Wisconsin study: 86% equity and 14% debt. AW Init. Br. at 6. This structure is close to the most conservative structure that would still support a AA bond rating – given that Ameritech Wisconsin’s proposed structure and debt:equity ratio produce interest coverage of only **[Begin Conf\*\*\*\*\*End Conf]** times, whereas the median interest coverage for a AA rated company currently is 10.8 times. Tr. Vol. 4 at 1312; Tr. Vol. 12 at 4379; AW Init. Br. at 8.

(b) What return on equity and return on debt should be used?

#### **SYNOPSIS OF TESTIMONY**

*See supra* at Section I.B.(1).



#### PROPOSED CONCLUSIONS OF LAW

24. The Commission adopts the 13.00% return on equity and the 7.18% return on debt costs utilized in the Ameritech Wisconsin study. Ex. 34 at 37; AW Init. Br. at 8. Neither Staff nor the CLEC Coalition has challenged the Ameritech Wisconsin proposal on these grounds (AW Init. Br. at 8), and we find these values to be reasonable.

(2) How should the mark-up for joint and common costs be determined?

(a) Should Ameritech Wisconsin's (Ameritech) model be used with or without revisions or should some other method be used?

#### SYNOPSIS OF TESTIMONY

William Palmer testified on the Ameritech Wisconsin model for joint and common costs. Tr. Vol. 2 at 824-68 (Palmer Rebuttal); Tr. Vol. 2 at 990-1022 (Palmer Cross, Redirect and Recross); Tr. Conf. Vol. 3 at 665-69 (Palmer Confidential Additional Direct). ✓

#### PROPOSED FINDINGS OF FACT

25. Ameritech Wisconsin proposes a joint and common cost model markup of **[Begin Conf\*\*\*\*\*End Conf]**.

26. The Ameritech Wisconsin joint and common cost model closely mirrors the top down approach presented by Staff in Case No. 6720-T1-120 (the "SGAT case"). Tr. Vol. 2 at 828; AW Init. Br. at 19. This model calculates relationships between retail and wholesale investments and expenses and explicitly adjusts these relationships to incorporate forward-looking cost savings, inflationary and deflationary factors, and SBC/Ameritech merger savings and to convert book costs to current costs. *Id.* The model uses the adjusted relationships to develop ratios between indirect (joint and common) costs and direct incremental (TELRIC) costs

27. Ameritech Wisconsin's model first produces wholesale and retail ratios by taking all product support and product management costs that are not incremental to a single, specific product or service, and placing them in three baskets: wholesale UNEs, retail and "N/A" or "not used." Ex. 20 at 3; AW Init. Br. at 20. "N/A" or "not used" are non-retail expenses and investments that are not related to UNEs or interconnection. *Id.*

28. The model segregates the costs in this fashion by using detailed activity records and business unit identifier codes. The relative size of these three baskets determines the wholesale UNE : retail/"not used" ratio, which is applied to three categories that make common loadings to determine the share of common costs in each category that should be allocated to UNEs. Ex. 20 at 3 *et. seq.*; AW Init. Br. at 20.

29. The model deals with one category of joint costs: Product Support – accounts related specifically to the provision and development of UNEs. Ex. 20 at 4; AW Init. Br. at 20. And the model develops three categories of common costs:

- Network Support, which includes account expenses required for the operation of the telecommunications network itself. Ex. 20 at 5; AW Init. Br. at 5.
- General Support, which consists primarily of accounts that are asset related, but serve a secondary, support role to the main network investments. Ex. 20 at 6; AW Init. Br. at 20.
- Corporate Overhead expenses, which help Ameritech Wisconsin operate efficiently as a whole. Ex. 20 at 7; AW Init. Br. at 20.

30. For each of these four categories, the model develops a ratio, consisting of a numerator and a denominator. Ex. 20; AW Init. Br. at 20-22. From this process, ratios are

31. In 1996, applying the same standard that must be applied here, this Commission determined that a reasonable measure of joint and common costs was 27% in the AT&T arbitration and 29% in the later MCI arbitration. Tr. Vol. 2 at 833; AW Init. Br. at 14; AW Reply Br. at 51.

32. Using that same standard, the Illinois commission adopted a joint and common cost markup of 34.55%, and the Ohio commission adopted one of 33.64% – both higher than what Ameritech Wisconsin proposes here. Tr. Vol. 2 at 833; AW Init. Br. at 14-15; AW Reply Br. at 52.

33. Both AT&T and WorldCom have supported the use of the Hatfield Model throughout the country for determining rates purportedly consistent with the 1996 Act. Tr. Vol. 2 at 836; AW Init. Br. at 15; AW Reply Br. at 52. This model derives markups for Ameritech Wisconsin for corporate overhead and total common loadings of 10.4% and 24.3%, respectively. *Id.* Ameritech Wisconsin's own joint and common cost model derives substantially lower loadings: 4.96% for corporate overhead and 19.59% for total common loadings. *Id.*

34. AT&T was accorded non-dominant status by the FCC in 1995, when the FCC concluded "that there was substantial competition in the long distance market." Tr. Vol. 2 at 834; AW Init. Br. at 16-17; AW Reply Br. at 52. AT&T filed complete USOA data in 1995, on the eve of being accorded non-dominant status and therefore at a time when AT&T's joint and common costs "should reflect those of an efficient competitor in an effectively competitive market." Tr. Vol. 2 at 834; AW Init. Br. at 16-17; AW Reply Br. at 52. Based on that data,

35. The Commission adopts the [Begin Conf\*\*\*\*\*End Conf] joint and common cost factor proposed by Ameritech Wisconsin. This factor is consistent with those approved in the initial AT&T and MCI arbitrations as well as the conclusions reached by state commissions in Illinois and Ohio. Tr. Vol. 2 at 833; AW Init. Br. at 14-15; AW Reply Br. at 51-52.

36. Adoption of Ameritech Wisconsin's proposed markup is also fully consistent with and required by the 1996 Act and the FCC's implementing regulation and orders. *See First Report and Order*, ¶¶ 679, 694 (mandating that the price of each element "shall" include "a reasonable measure of [joint and common] costs"). Ameritech Wisconsin's proposed markup is "reasonable" because:

- it first carefully identifies those indirect product management costs associated with UNEs within the pool of all product management costs;
- then it applies the ratio derived from that exercise (UNE costs-to-non-UNE costs) to three categories of common costs – so that UNEs bear only their proportionate share of those common costs;
- these UNE-related costs then become the numerators of the determinative fraction, and the total direct incremental costs associated with UNEs become the denominators;
- and, to insure consistency, these direct incremental costs are used to derive the TELRIC of the individual UNEs.

37. We reject the CLECs' proposed markup of [Begin Conf\*\*\*\*\*End Conf]. Rather than proposing their own model, as they did in the case of nonrecurring costs and collocation, here the CLECs merely purport to "adjust" Ameritech Wisconsin's model. All of



direct incremental costs associated with UNEs; however, in all of their other testimony, the CLECs endeavor to cut this pool of direct incremental costs by half or more, in order to obtain low TELRIC rates. The CLECs cannot have it both ways. The CLECs' effort to deflate the numerator fares no better. To accomplish that, the CLECs:

- eliminate with no justification substantial *wholesale* product costs related directly to provisioning and supporting the use of UNEs (*i.e.*, quintessential joint costs);
- eliminate tens of millions of dollars of common costs based on the unsupported assertion that those sums *might* contain a small amount of direct costs attributable to an unregulated service;
- arbitrarily reduce Ameritech's common costs by 24% to reflect cost savings that increased efficiency will bring – while ignoring altogether that Ameritech's model already incorporates anticipated savings in roughly the same amount;
- remove expenses that have already been removed from certain clearance accounts; and
- improperly eliminate legal and related expenses that Ameritech is forced to incur by the 1996 Act and proceedings such as this one, and thereby force retail customers to bear the entire cost.

Accordingly, we reject both categories of adjustments.

38. We find that the CLECs' proposed markup is far short of a "reasonable" measure of Ameritech Wisconsin's joint and common costs. It would therefore be a violation of federal law for us to adopt the CLECs' proposal. It would also be bad public policy. Unreasonably low joint and common costs would force Ameritech Wisconsin to forego recovery of those costs.

That would cause it to lose both its incentive and its ability to make needed investments in network facilities and infrastructure. If that were to occur, Wisconsin customers would suffer the

multiple services. To price without regard to those costs is to penalize a firm for its efficiencies.” J. Gregory Sidak & Daniel F. Spulber, *The Tragedy of the Telecommons: Government Pricing of Unbundled Network Elements under the Telecommunications Act of 1996*, 97 Colum. L. Rev. 1081, 1147 (1997). Accordingly, if Ameritech Wisconsin were denied full recovery of its joint and common costs, it would be compelled (if it were to remain in business) to reduce those costs. And that would mean foregoing activities that create “economies of scope” and increased efficiency.

39. Before discussing (and rejecting) the various adjustments of the CLEC Coalition, we consider here the sole proposed adjustment by Staff: the elimination of all product management costs for UNEs. We conclude that Ameritech Wisconsin incurs UNE-specific product management costs, costs that may in fact exceed substantially those associated with retail products. Tr. Vol. 2 at 860-61; AW Init. Br. at 18. Accordingly, we reject Staff’s proposed adjustment to the Ameritech Wisconsin model.

**(b) If Ameritech’s model is used:**

- 1. Should product management costs for wholesale products be shared among all products or borne solely by wholesale products? (This includes the relationship between wholesale and retail mark-ups.)**
  - a. Should all product management costs for wholesale services be included in the shared and common mark-up or should some be eliminated?**

**SYNOPSIS OF TESTIMONY**

*See supra* at Section I.B.(2).

41. Ameritech Wisconsin has accurately identified these costs on an item-by-item basis through the use of business unit identifier codes, which in turn identify for each activity whether it was undertaken to support retail products or UNEs and interconnection. *Id.*

42. Ameritech Wisconsin has provided extensive backup data and documentation for this process to the CLECs and Staff, including complete electronic files containing all the data used to identify the specific costs that were allocated to wholesale product support. *Id.* This backup data and documentation fully support Ameritech Wisconsin's conclusion regarding both the amount of UNE-related product management costs and the relative size of these costs compared with product management costs associated with retail products and services and non-UNE wholesale products and services.

43. UNEs are frequently more complex than retail products, and require a level of activity and associated product management costs that exceeds those associated with retail services. Tr. Vol. 2 at 861; AW Init. Br. at 24-25.

#### **PROPOSED CONCLUSIONS OF LAW**

44. The 1996 Act and the FCC have answered this question for the Commission. AW Init. Br. at 23. Product management costs for wholesale UNE products should be borne by wholesale UNE products, the cost-causer, consistent with paragraph 691 of the *First Report and Order*. AW Init. Br. at 23.

45. Ameritech Wisconsin has provided extensive backup data and documentation for its wholesale product management costs. Tr. Vol. 2 at 860; AW Init. Br. at 24. Despite the

common sense notion that UNEs are more complex, and more costly than retail products, the Commission must reject the CLEC Coalition's proposed adjustment as wholly unsupported by the record. Tr. Vol. 2 at 861; AW Init. Br. at 25-26.

2. **Should any other adjustments be made to Ameritech's model, including any of the following?**

**SYNOPSIS OF TESTIMONY**

*See supra* at Section I.B.(2). ✓

**PROPOSED FINDINGS OF FACT**

46. *See infra* at Section I.B.(2)(b)2 at a.-e.

**PROPOSED CONCLUSIONS OF LAW**

47. The Commission rejects the proposed adjustments to the Ameritech Wisconsin model. AW Init. Br. at 26.

- a. **Base calculations on a combination of regulated and nonregulated costs?**

**SYNOPSIS OF TESTIMONY**

*See supra* at Section I.B.(2). ✓

**PROPOSED FINDINGS OF FACT**

48. Ameritech Wisconsin's model takes care to exclude from wholesale product support costs all such wholesale costs that are not related directly to UNEs or interconnection. Ex. 20 at 3 *et seq.*; AW Init. Br. at 24. For example, the model classifies all product support costs for pay phone equipment as "N/A" or "not used," thereby explicitly excluding these costs from the wholesale product support costs. Tr. Vol. 2 at 845; AW Init. Br. at 27-28.

27. Moreover, the CLEC Coalition fails to identify any instances where a direct cost was improperly included in one of the common cost pools. AW Reply Br. at 53. Accordingly, the Commission must reject this proposed adjustment as unsupported by the record.

**b. Adjust for network growth?**

**SYNOPSIS OF TESTIMONY**

*See supra* at Section I.B.(2). ✓

**PROPOSED FINDINGS OF FACT**

50. CLEC Coalition witness, Mr. Behounek, proposes an investment growth adjustment. Tr. Vol. 8 at 2847; AW Init. Br. at 28. He does this in order to inflate the pool of direct incremental (or TELRIC) costs that make up the denominator.

51. This adjustment is inconsistent with and contradicted by the testimony of CLEC Coalition witnesses, Dr. Ankum and Mr. Starkey, who claim that Ameritech Wisconsin's TELRIC numbers are too high and must come down. Tr. Vol. 2 at 851; AW Init. Br. at 28.

52. The proposed CLEC Coalition adjustment does not adjust any of the operation and maintenance expenses related to the investment expenses. Tr. Vol. 2 at 852; AW Init. Br. at 29.

53. Ameritech Wisconsin's model already makes adjustments to account for expected changes in investment expenses. Tr. Vol. 2 at 849; AW Init. Br. at 29.

54. The model starts with 1998 booked investment levels, on an account-by-account basis, and restates them on a current year basis. Tr. Vol. 2 at 849; AW Init. Br. at 29-30.

## PROPOSED CONCLUSIONS OF LAW

56. We reject the CLEC Coalition's proposed investment growth adjustment for three reasons. AW Init. Br. at 28-30.

57. *First*, this adjustment is flatly inconsistent with and directly contradicted by the testimony of CLEC Coalition witnesses that claim Ameritech Wisconsin's TELRIC numbers are too high and must be reduced. Tr. Vol. 2 at 851; AW Init. Br. at 28. The Commission rejects the CLEC Coalition's inconsistent treatment of TELRIC costs.

58. *Second*, the proposed CLEC Coalition adjustment is inconsistent as applied. Tr. Vol. 2 at 852; AW Init. Br. at 29. There is no effort to increase the related operating and maintenance expenses. That is, if investment costs increase (thereby increasing the denominator and shrinking the fraction), it is reasonable to assume that the operating and maintenance costs also would increase to accommodate the growth in capital goods. But this latter adjustment would inflate the numerator, thereby increasing the joint and common cost markup. It is because of this, we suspect, that the CLECs have opted only to adjust capital investment and to ignore the related, and necessary, adjustment to operating and maintenance expenses. *Id.*

59. *Third*, the Ameritech Wisconsin model already accounts for expected changes in investment expenses. Tr. Vol. 2 at 849; AW Init. Br. at 29-30.

c. Reflect increased efficiency based on AT&T percentages?

## SYNOPSIS OF TESTIMONY

*See supra* at Section I.B.(2).

✓

AT&T annual reports for the expenses in question highlights why such a comparison is not appropriate.

61. As AT&T was being declared non-dominant, between 1994 and 1995, AT&T experienced a \$2.726 billion increase in SG&A expenses. AW Init. Br. at 31. Between 1997 and 1999, AT&T's SG&A expenses fell by less than 6%: from \$14.371 billion to \$13.516 billion, or a total of \$855 million (less than one-third of the increase in these expenses experienced between 1994 and 1995). *Id.* During the same period, revenues increased from \$51.577 billion to \$62.391 billion. AW Init. Br. at 32.

62. The Ameritech Wisconsin model assumes a 3% reduction per year from the Commission's price cap proceedings for Network Support, General Support and Corporate Overhead. Tr. Vol. 2 at 853; AW Init. Br. at 32.

63. This reduction falls only \$6 million short of matching the percentage reduction in AT&T's SG&A expenses during the three-year period 1997 to 1999. AW Init. Br. at 32.

#### **PROPOSED CONCLUSIONS OF LAW**

64. The Commission rejects the CLEC Coalition's proposed efficiency adjustment. AW Init. Br. at 31. Such an adjustment is wholly unwarranted. *Id.*

65. AT&T achieved the purported "efficiency adjustment" advocated here by significantly increasing its revenues, rather than by significantly reducing its administrative expenses. AW Init. Br. at 31-32. The Ameritech Wisconsin model already assumes a reduction that approximates that actually achieved by AT&T. Tr. Vol. 2 at 853; AW Init. Br. at 32.

66% greater than that adopted by us here. *Id.* This highlights the reasonableness of our decision to adopt the Ameritech Wisconsin factor without adjustments of any sort.

- d. **Consider part of plant operations administrations and engineering as doubled counted and remove those costs considered to be double counted?**

#### SYNOPSIS OF TESTIMONY

*See supra* at Section I.B.(2). ✓

#### PROPOSED FINDINGS OF FACT

67. There is no double counting of expenses in the Plant Operations Administration and Engineering accounts. AW Init. Br. at 33; AW Reply Br. at 54.

68. Throughout the accounting period in question, from time to time expenses initially included in these accounts are identified with specific construction projects and specific plant operations. Tr. Vol. 2 at 857; AW Init. Br. at 33. When that occurs, the amounts identified are removed from the “clearance” accounts and placed in more specific accounts. *Id.* Once removed in this fashion, the expenses in question are no longer in the clearance accounts – they have been cleared – and the remaining balance is net of the expenses that have been “cleared.” *Id.* Only the net amounts remaining after all “clearances” have been booked are included in Ameritech Wisconsin’s common cost pools. *Id.*

69. Since the Network Administration account is not a clearance account, Ameritech Wisconsin has had to make specific adjustments to remove costs appropriate for TELRIC cost studies. Tr. Vol. 2 at 858; AW Reply Br. at 55.

70. Ameritech Wisconsin has provided the CLECs with significant documentation



71. The Commission rejects the CLEC Coalition proposed adjustment to the Plant Operations Administration and the Engineering accounts for alleged double-counting. AW Init. Br. at 33; AW Reply Br. at 54.

72. There is no double-counting; amounts originally included in these clearance accounts are removed – or “cleared” – into more specific accounts as soon as they are identified with specific projects and/or operations. Tr. Vol. 2 at 857-58; AW Init. Br. at 33; AW Reply Br. at 54. All relevant amounts are either in the clearance accounts or in other accounts; they are not and cannot be in both places at the same time. *Id.*

73. The Network Administration account is not a clearance account; therefore, the Ameritech Wisconsin model appropriately makes specific adjustments to remove direct costs that are appropriate for TELRIC cost studies. Tr. Vol. 2 at 858; AW Reply Br. at 55. This account and the clearance accounts are simply not comparable. The Commission must reject this proposed adjustment as unsupported by and completely inconsistent with the record

**e. Eliminate legal and external relation costs**

**SYNOPSIS OF TESTIMONY**

*See supra* at Section I.B.(2).



**PROPOSED FINDINGS OF FACT**

74. The Act requires Ameritech Wisconsin to incur legal expenses to implement its requirements. AW Init. Br. at 33; AW Reply Br. at 55.

75. As recognized by the Illinois Commerce Commission in a proceeding similar to

Vol. 2 at 864; AW Init. Br. at 33-34; AW Reply Br. at 55-56. The Illinois commission recognized that these expenses are not optional: “The Act *requires* Ameritech Illinois to participate in such negotiations and arbitrations, which are initiated by competitors, not Ameritech Illinois.” Tr. Vol. 2 at 864-65 (emphasis in original); AW Init. Br. at 34. That commission permitted Ameritech Illinois to recover in its UNE and interconnection rates legal expenses incurred in implementing the Act. *Id.*

76. As in that proceeding, Ameritech Wisconsin simply seeks to pass on its legal expenses to all of its customers on a strictly pro rata basis. Tr. Vol. 2 at 864; AW Init. Br. at 34; AW Reply Br. at 56.

#### **PROPOSED CONCLUSIONS OF LAW**

77. The Commission rejects the CLEC Coalition adjustment to eliminate legitimate legal and external costs incurred by Ameritech Wisconsin.

78. We find the reasoning of the Illinois Commerce Commission to be persuasive. AW Init. Br. at 33-34; AW Reply Br. at 55. Ameritech Wisconsin incurs substantial legal expenses in implementing the requirements of the 1996 Act (AW Init. Br. at 33), and these expenses are not optional. Tr. Vol. 2 at 864; AW Init. Br. at 33-34; AW Reply Br. at 55-56. All that the model seeks to do is pass on Ameritech Wisconsin’s legitimate legal expenses to all of its customers on a strictly pro rata basis. Tr. Vol. 2 at 864; AW Init. Br. at 34; AW Reply Br. at 56. The Commission finds this to be reasonable, consistent with common sense, and consistent with (indeed, required by) federal law, and therefore rejects this proposed adjustment.

**SYNOPSIS OF TESTIMONY**

*See supra* at Section I.B.(2).

**PROPOSED FINDINGS OF FACT**

79. *See supra* at Section I.B.(2).

**PROPOSED CONCLUSIONS OF LAW**

80. In adopting the Ameritech Wisconsin model in its entirety, we adopt the “rolling denominator” as described in Exhibit 20 as well as in Ameritech Wisconsin’s Initial Brief (at pp. 19-23).

4. How should Joint and Common costs be assigned to the different elements?

**SYNOPSIS OF TESTIMONY**

*See supra* at Section I.B.(2).

**PROPOSED FINDINGS OF FACT**

81. The Ameritech Wisconsin model proposes the use of a single joint and common cost loading factor, which is consistent with the top-down methodology presented by Staff and adopted by this Commission in Docket No. 6720-T1-120. Tr. Vol. 2 at 828; AW Init. Br. at 35-36; AW Reply Br. at 57-58. This method was specifically recognized as reasonable under the FCC’s TELRIC rules. *First Report and Order*, ¶ 696; Tr. Vol. 2 at 828; AW Init. Br. at 35-36; AW Reply Br. at 57-58.

**PROPOSED CONCLUSIONS OF LAW**

82. The Commission adopts the fixed allocator proposed by Ameritech Wisconsin. AW Init. Br. at 35-36; AW Reply Br. at 57-58. The FCC specifically recognizes the allocation

**C. Loop Related Issues**

- (1) What factors should the Commission consider when determining whether or not the loop rates and subloop rates proposed by Ameritech are reasonable?**

**SYNOPSIS OF TESTIMONY**

Mr. Palmer and Dr. Aron discussed the factors that the commission should consider when evaluating Ameritech Wisconsin's UNE rates Tr. Vol. 2 at 676-696 (Palmer Direct); Vol. 2 at 644-46, 658-61 (Palmer Additional Direct); Conf. Vol. 3 at 496-508 (Palmer Rebuttal); Vol. 6 at 1868-79 (Aron Rebuttal); Vol. 6 at 1902-09 (Aron Supplemental Surrebuttal). ✓

**PROPOSED FINDINGS OF FACT**

83. The rates approved in other states cannot be used to judge the reasonableness of Ameritech Wisconsin's proposed rates because: (1) the circumstances in each state differ; and (2) the existing UNE rates in Wisconsin and in the other Ameritech states are based on cost models and input assumptions that are flawed and that systematically and substantially understate Ameritech Wisconsin's true costs. Tr. Conf. Vol. 3 at 496-503; AW Reply Br. at 62.

84. Some of Ameritech Wisconsin's proposed UNE rates (in particular, its proposed loop rates) are higher than those approved by the Commission in earlier proceedings; some are substantially lower -- namely, Ameritech Wisconsin's proposed switching and transport related UNE rates. There are three principal reasons why the proposed loop rates are higher. (AW Reply Br. at 62-64):

- Ameritech Wisconsin now advocates fill factors that are carefully calibrated to comply with the requirement in ¶ 682 of the *First Report and Order* that fill factors be based on a "reasonable projection of the actual total usage of the element." Previous fills assumed an unrealistically high degree of utilization wholly divorced from the actual total usage of the element, as well as from a reasonable projection of such usage, and therefore resulted in below-cost, and below TELRIC, UNE rates. Tr. Conf. Vol. 3 at 496-508.

- Ameritech Wisconsin uses a slightly higher shared and common cost factor that more accurately captures shared and common costs. Tr. Conf. Vol. 3 at 496-98.

85. There are practical constraints that limit the ability of any cost model to capture all relevant costs, and therefore, Ameritech Wisconsin's cost study results should be considered conservative. Tr. Vol. 2 at 681.

86. UNE rates should be set based on costs; they should not be "driven as low as possible." Tr. Vol. 6 at 1872; AW Reply Br. at 59.

87. If UNE rates are set below cost: (1) CLECs will have no incentive to build their own facilities and provide services at cost; (2) CLECs purchasing UNEs will have an unfair advantage over Ameritech Wisconsin, as well as over facilities-based CLECs, because CLECs using UNEs will be able to offer lower prices for their services; and (3) all parties – ILECs and CLECs alike – will have less incentive to invest in existing and new infrastructure and new technology. Consumers lose as a result. Tr. Vol. 6 at 1870, 1872, 1876-77; AW Reply Br. at 60-61

88. The Act contemplates genuine competition that serves the public interest, not inefficient market entry. The genuine competition envisioned by the Act may (but does not always) result in lower prices, but it does benefit consumers by yielding: (1) more efficient investment in new technologies; (2) more efficient investment in existing and new infrastructure; and (3) improved products and services to better meet customer desires. Tr. Vol. 6 at 1873, 1877; AW Br. at 61.

associated with rates that are too high. Rates that are too high might impair successful implementation of a business plan that relies primarily or solely on the use of leased UNEs; but it would not diminish the incentives associated with facilities-based competition – which is the engine of true, consumer benefit maximizing competition. Tr. Vol. 6 at 1870; AW Reply Br. at 61.

#### **PROPOSED CONCLUSIONS OF LAW**

90. Congress, through the pricing provisions in Section 252(d) of the 1996 Act, and the FCC, through its regulations and orders interpreting and implementing those provisions, have decided what is reasonable in terms of the factors that should be used in determining UNE rates. The Commission is bound to heed these determinations made by Congress and the FCC, and it *must* apply those factors in determining UNE rates. *AT&T v. Iowa Utilities Board*, 525 U.S. 366, 378 n. 6 (1999).

91. Section 252(d) requires that UNE rates be set based on cost. The public interest requires this as well. The below-cost UNE rates advocated by the CLECs will foster inefficient competition and entail significant social costs that will, in the long run, disserve the public interest. They destroy the incentive of both ILECs and CLECs alike to invest in existing and new infrastructure and new technology. On the other hand, setting UNE rates based on cost furthers the kind of genuine competition envisioned by the Act. This kind of competition benefits consumers by potentially resulting in lower prices, and by yielding more efficient investment in new technologies, in existing and new infrastructure, and in improved products

refined assumptions and methodologies should be rejected out of hand because these rates are all higher than those previously approved in Wisconsin and other Ameritech states. We reject this invitation to reject, in wholesale fashion, Ameritech Wisconsin's proposed rates. First, it is not true that all rates have "gone up"; some have declined significantly (*e.g.*, the proposed switching and transport rates). Second, those that have in fact "gone up" now more closely adhere to Section 252(d)'s mandate. Accordingly, we accept and adopt Ameritech Wisconsin's proposed UNE rates.

**(2) How should loop cost and subloop cost inputs be calculated?**

**(a) What fill factors should be used for the following portions of the loop?**

- 1. Distribution**
- 2. Feeder – copper**
- 3. Feeder – fiber**
- 4. Loop electronics**

**SYNOPSIS OF TESTIMONY**

Mr. Palmer and Mr. Mullen discussed Ameritech Wisconsin's loop fill factors, the methodology used to derive those fill factors, and why those fill factors are reasonable and appropriate. Tr. Vol. 2 at 682-84 (Palmer Direct); Conf. Vol. 3 at 659-60 (Palmer Additional Direct); Conf. Vol. 3 at 503-08, 546-53 (Palmer Rebuttal); Vol. 2 at 1055-65 (Mullen Direct); Conf. Vol. 3 at 1040-49 (Mullen Additional Direct); Vol. 2 at 1068-71 (Mullen Cross). ✓

**PROPOSED FINDINGS OF FACT**

93. Ameritech Wisconsin is proposing fill factors in this proceeding that deviate from the hypothetical fill factors approved in the 1997 SGAT proceeding because: (1)

Paragraph 682 of the FCC's *First Report and Order* clearly contemplates – indeed, *mandates* –

reasonable projections of actual usage in the future, are easily defined and measured, and therefore eliminate the debate surrounding the definition of hypothetical fills. Tr. Vol. 2 at 683-84.

94. Ameritech's proposed fill factors are beginning to be proposed and appear on the record in other Ameritech states. Tr. Vol. 3 at 547.

95. Ameritech Wisconsin's fill factors are not based on an embedded network design. Rather, its cost studies assume a forward-looking, efficiently deployed network as required by TELRIC, and it bases its fill factors on the amount of actual usage anticipated in the components of that network. Tr. Conf. Vol. 3 at 549; AW Init. Br. at 44-45; AW Reply Br. at 64-66.

96. Ameritech Wisconsin's proposed fill factors account for the additional network capacity required for maintenance, testing, and administrative purposes, as well as for the standby capacity required to actually serve new customers. Tr. Vol. 2 at 678.

97. While the fill factor for a particular component or facility fluctuates over time due to shifts in demand, the average fill factor is stable. This is because as demand consumes spare facilities, new facilities are installed, thereby increasing spare capacity in the network and decreasing the overall fill factor. Tr. Vol. 2 at 1014-15, 1058; Tr. Vol. 3 at 550; AW Init. Br. at 49-50.

98. Ameritech Wisconsin's fill factors are the best estimates of the "actual total usage" of the relevant network components as they are deployed in the forward-looking TELRIC-mandated network. This is because:



mature, utilization rates tend to remain stable over time; and that is the case here, where the actual total usage of each of the four loop components has been stable over a number of years. Tr. Vol. 2 at 1055-65, 1068-69; AW Init Br. at 46-47; AW Reply Br. at 66-67.

- The same economic and technological factors that drove placement and spare capacity decisions for distribution and feeder plant in the past will continue to drive such decisions in the foreseeable future. Deployment decisions for each component are driven by a fundamental cost/benefit analysis that does not change, and thus, Ameritech Wisconsin will (if it is to be efficient) continue to lay spare capacity in the future in the same proportion as it has in the past. Tr. Vol. 2 at 1048, 1058, 1068-70; Tr. Conf. Vol. 3 at 549-50. Telephone plant in the future will continue to be available in a limited array of sizes and spare capacity requirements for maintenance, administration, and growth will continue to be network design considerations. Tr. Conf. Vol. 3 at 548-53; AW Init. Br. at 47-50; AW Reply. Br. at 67-69.

99. Copper distribution plant provides a graphic example of why current usage is an accurate reflection of actual usage in the future. The forward-looking hypothetical network mandated by TELRIC will employ copper distribution. For years, Ameritech Wisconsin's copper distribution plant has exhibited a fill factor of about **[Begin Conf \*\*\* \*\*\*\*\* End Conf]**. This relatively low fill factor is the result of economic realities that drive placement and spare capacity decisions. These economic realities will persist in the future -- meaning that the most reasonable projection of actual usage in the future is the same **[Begin Conf \*\*\* \*\*\*\*\* End Conf]** fill. What are these economic realities? Assume that current demand would be more than satisfied by a 25 pair cable. Nevertheless, an efficient firm would lay a 50 pair cable immediately. The reason is simple. The incremental cost of laying the 50 pair cable now is **[Begin Conf \*\*\* \*\*\*\*\* End Conf]** per foot, while the cost of adding a 25 pair cable in

efficient in the foreseeable future. Tr. Vol. 2 at 1060-70; AW Init. Br. at 48-49; AW Reply Br. at 67-68.

#### PROPOSED CONCLUSIONS OF LAW

100. The Commission adopts Ameritech Wisconsin's proposed fill factors. Paragraph 682 of the *First Report and Order* requires that fill factors be a "reasonable projection of the *actual total usage of the element*." The Commission is bound by this mandate and concludes that the fill factors proposed by Ameritech Wisconsin represent the most reasonable estimate of the actual usage that would occur in the forward-looking network posited by Ameritech Wisconsin's cost studies. Moreover, Ameritech Wisconsin's fill factors are the only ones proposed that comply with paragraph 682.

101. Contrary to the CLECs' claim, Ameritech Wisconsin's fills are not based on its embedded network. Ameritech Wisconsin's proposed fill factors are *not* the actual current usage of its actual, existing network. Rather, its fill factors represent the actual current usage experienced by the current components of the network *as they would be redeployed and reconfigured in the forward-looking network required by TELRIC*. Even though Ameritech Wisconsin's cost model is premised on a remodeled *network* (the TELRIC-mandated, least-cost, forward-looking network), that reconfigured network will employ technologies that Ameritech Wisconsin uses today in its existing network for each of the four loop plant *components*.

102. The current actual fills experienced by the components of the forward-looking network constructed by Ameritech Wisconsin's cost models are the most reasonable projection

103. Copper distribution provides a graphic example of why current usage is an accurate reflection of actual usage in the future. All parties agree that the forward-looking network mandated by TELRIC will employ copper distribution plant. The undisputed evidence discloses that for years Ameritech Wisconsin's copper distribution plant has exhibited a consistent fill factor of about **[Begin Conf \*\*\* \*\*\*\*\* End Conf]**. This relatively low fill is both economically efficient and a reasonable projection of actual future usage. Even if current demand would be more than satisfied by a 25 pair cable, an economically efficient firm would lay a 50 pair cable now – even though that would result in a fill factor of substantially less than 50%. The reason is simple. The incremental cost of laying the 50 pair cable now is **[Begin Conf \*\*\* \*\*\*\*\* End Conf]** per foot, while the cost of adding a 25 pair cable in the future is **[Begin Conf \*\*\* \*\*\*\*\* End Conf]** per foot. Accordingly, the **[Begin Conf \*\*\* \*\*\*\*\* End Conf]** fill factor is, and will remain for the foreseeable future, the economically efficient result, because a **[Begin Conf \*\*\* \*\*\*\*\* End Conf]** cent per foot investment now will save resources and costs 50 times greater in the future.

(b) What maintenance factor should be used for loop and subloop plant?

#### SYNOPSIS OF TESTIMONY

Mr. Palmer discussed Ameritech Wisconsin's maintenance factors and why they are reasonable. Tr. Conf. Vol. 3 at 615-24 (Palmer Rebuttal). ✓

#### PROPOSED FINDINGS OF FACT

104. Ameritech Wisconsin's maintenance factors are designed to recover Ameritech Wisconsin's maintenance expenses – the costs of keeping telephone plant and equipment

106. Ameritech Wisconsin derived these factors by developing average annual investments for each plant account and each associated expense account, and then applying labor-based inflation rates because maintenance costs are primarily labor-related costs. Tr. Conf. Vol. 3 at 616-17; AW Init. Br. at 55-56; AW Reply Br. at 70-71.

107. Because the forward-looking investment values are substantially lower than current investment values, Ameritech Wisconsin's forward-looking maintenance factors are significantly lower than previous factors. Tr. Conf. Vol. 3 at 622; AW Init. Br. at 55; AW Reply Br. at 70.

#### **PROPOSED CONCLUSIONS OF LAW**


108. The maintenance factors used in Ameritech Wisconsin's unbundled loop cost study are adopted. Those maintenance factors are reasonable and fully consistent with the costing methodology mandated by the FCC.

109. Mr. Behounek's maintenance factor methodology and his critique of Ameritech Wisconsin's methodology is unsound and replete with errors. Tr. Conf. Vol. 3 at 617-24; AW Reply Br. at 70-71.

- (c) **What prices should be used for loop electronics – specifically what blend of growth versus replacement lines should be used? Should the blend be the same as used in the switching inputs, since these are procured from the same contracts, or are there reasons to use a different blend?**

#### **SYNOPSIS OF TESTIMONY**

Mr. Palmer discussed the appropriate prices to use for DLC equipment. Tr. Conf. Vol. 3 at 557-65 (Palmer Rebuttal); Tr. Conf. Vol. 3 at 661-65 (Palmer Additional Direct).



111. Even though Ameritech's DLC purchases from Alcatel are now governed by the contract between SBC and Alcatel, it is unreasonable to require that cost studies be re-run every time an input changes. Tr. Conf. Vol. 3 at 560; AW Init. Br. at 56-57.

112. No one – including the CLECs – has had a chance to fully review the numerous provisions of the SBC/Alcatel agreement to determine what prices increased and what prices decreased. New contracts will reduce prices for some items while increasing prices for other items, and some prices have increased under the SBC/Alcatel agreement. In addition, some of the provisions of the SBC/Alcatel agreement do not even apply to Ameritech. Moreover, the term and volume discounts in the SBC/Alcatel contract are speculative, and no guarantee exists that Ameritech will buy enough DLC units within the established time frames to trigger the discounts. Tr. Conf. Vol. 3 at 561-64, 663-65; AW Init. Br. at 57-59; AW Reply Br. at 72-76.

#### **PROPOSED CONCLUSIONS OF LAW**

113. The Commission adopts the material prices for DLC equipment that are reflected in Ameritech Wisconsin's cost study. Ameritech Wisconsin used the prices from the contract that governed its DLC equipment purchases at the time it ran the cost studies. As a practical matter, cost studies cannot be revised every time an input changes or a new contract materializes. And even if it were proper to rely upon the agreement that currently governs Ameritech's DLC purchases from Alcatel, no party has thoroughly reviewed all of the provisions in that contract and determined exactly whether, and how, it affects the DLC price inputs used in the cost study. Moreover, there is no assurance that Ameritech will buy DLC equipment in the quantities and

**(d) What installation factors should be used?**

**SYNOPSIS OF TESTIMONY**

Mr. Palmer discussed Ameritech Wisconsin's installation factors and why they are appropriate. Tr. Conf. Vol. 3 at 565-69; Tr. Vol. 2 at 816-21 (Palmer Rebuttal). ✓

**PROPOSED FINDINGS OF FACT**

114. Ameritech Wisconsin applied in-plant factors because Alcatel will not bear all costs associated with providing service on its DLC units. Even under the current SBC/Alcatel contract, Ameritech Wisconsin is still required to bear the costs of turning up service on Alcatel DLC units. Use of installation factors in the cost study to recover these costs is therefore necessary. Tr. Vol. 2 at 818; AW Init. Br. at 59-60; AW Reply Br. at 77.

115. Ameritech Wisconsin applied a plug-in in-plant factor to account for taxes, transportation, and other material handling costs incurred by Ameritech Wisconsin and not included in the vendor prices, and for Litespan plug-in cards for services such as POTS. Tr. Conf. Vol. 3 at 565-66; AW Init. Br. at 60-61.

116. Ameritech Wisconsin did not even apply a hardwire in-plant factor for Alcatel Litespan equipment. Rather, it applied only much smaller factors to account for the engineering and installation costs it actually incurs. Tr. Conf. Vol. 3 at 566-67; AW Init. Br. at 61.

117. While Alcatel may have agreed to upgrade existing DLC units for free, these provisions are irrelevant because Ameritech Wisconsin's cost studies are required to be forward-looking and thus assume a network built from scratch; thus, costs for upgrading older, existing equipment are not, and should not be, included. Tr. Conf. Vol. 3 at 563-64, 567-68.

**(e) What inventory factors should be used?**

**SYNOPSIS OF TESTIMONY**

Ameritech Wisconsin did not submit testimony on this issue. ✓

**PROPOSED FINDINGS OF FACT**

119. Ameritech Wisconsin's inventory factors (described at Tab 8.4 of the Unbundled Loop Study) account for the costs it incurs in maintaining the necessary inventory of equipment plug-ins to properly provision and maintain DLC-provided loops. These factors are not contested by the CLECs.

**PROPOSED CONCLUSIONS OF LAW**

120. Ameritech Wisconsin's inventory factors are adopted. They are reasonable and appropriately allow Ameritech Wisconsin to recover the costs it incurs in maintaining the necessary inventory of equipment plug-ins to properly provision and maintain DLC-provided loops.

**(f) What fiber/copper cross over point should be used?**

**SYNOPSIS OF TESTIMONY**

Mr. Palmer discussed the appropriate fiber/copper cross over point. Tr. Vol. 2 at 687 (Palmer Direct). ✓

**PROPOSED FINDINGS OF FACT**

121. Ameritech Wisconsin assumes a fiber versus copper cross-over point of 6000 feet. This cross-over point is the least-cost, forward-looking design for use in fiber facilities. Tr. Vol. 2 at 687.

**PROPOSED CONCLUSIONS OF LAW**

#### SYNOPSIS OF TESTIMONY

Ameritech Wisconsin did not submit testimony on this issue

#### PROPOSED FINDINGS OF FACT

123. The proportions of aerial, underground, and buried cable used in Ameritech Wisconsin's cost study are reasonable and should be adopted.

124. While the CLECs argue that Ameritech Wisconsin should use only 26-gauge copper cable in its loop plant, 22- and 24- gauge copper will be required as long as the network includes copper distribution facilities. The CLECs agree that throughout the time horizon covered by forward-looking costs studies, copper distribution will be required. Accordingly, Ameritech Wisconsin's use of all three copper cable gauges is appropriate.

#### PROPOSED CONCLUSIONS OF LAW

125. The proportions of aerial, underground, and buried cable used in Ameritech Wisconsin's cost study are reasonable and are therefore adopted. Moreover, Ameritech Wisconsin's use of 22- and 24- gauge copper cable (as well as 26-gauge copper cable) in its loop plant is reasonable and forward-looking.

(h) How should pole and conduit costs be allocated to Ameritech, CLECs and to third parties?

#### SYNOPSIS OF TESTIMONY

Mr. Palmer described the Net Rent Revenue ("NRR") adjustment and how it is used to net the rent payments between Ameritech and public utilities for using each other's pole and conduit facilities. Tr. Conf. Vol. 3 at 569-70 (Palmer Rebuttal). AW Init. Br. at 63.

#### PROPOSED FINDINGS OF FACT

126. Ameritech Wisconsin and public utilities pay each other rent for using the other's



127. Ameritech Wisconsin applied a Net Rent Revenue (“NRR”) adjustment in its cost study to net these rent transactions. Tr. Vol. 3 at 570. The NRR adjustment indicates that Ameritech Wisconsin should be allowed to increase the cost of each unbundled loop by **[Begin Conf\*\*\*\*\*End Conf]**. Unbundled Loop Study, Tab 8.4; AW Init. Br. at 63.

128. The NRR adjustment accounts only for the *rent* revenues that flow between Ameritech Wisconsin and the public utilities. Tr. Conf. Vol. 3 at 570. The NRR adjustment *does not* include the expenses associated with *connecting* to poles, nor any other expenses associated with the poles. Tr. Conf. Vol. 3 at 569-70. Rather, those expenses are included in the support factors associated with aerial cable. Tr. Conf. Vol. 3 at 569; AW Init. Br. at 63.

#### **PROPOSED CONCLUSIONS OF LAW**

129. Ameritech Wisconsin’s Net Rent Revenue adjustment is adopted. It appropriately allocates pole and conduit costs between Ameritech Wisconsin and third parties.

(i) **What depreciation lives and salvage values should be used?**

#### **SYNOPSIS OF TESTIMONY**

Mr. Palmer discussed the appropriateness of the depreciation lives used in Ameritech Wisconsin’s loop studies. Tr. Vol. 2 at 683 (Palmer Direct); Tr. Conf. Vol. 3 at 544-45 (Palmer Rebuttal). ✓

#### **PROPOSED FINDINGS OF FACT**

130. An economic life is an average life for a given piece of equipment, and thus, simply because some pieces in an equipment category may last longer than the economic life does not mean that the average is incorrect. Tr. Conf. Vol. 3 at 544-45.

131. Ameritech Wisconsin proposes that the Commission adopt in this proceeding the

132. Ameritech Wisconsin's economic lives are reasonable and forward-looking. They are the ones adopted by this Commission in Docket 05-DT-102, and are therefore adopted here.

(j) **How should loop cost calculations integrate a mix of copper and fiber plant and Digital Loop Carrier (DLC) technology?**

1. **What proportion of DLC should be used in the cost calculations?**

*See Section I.C.(2)(f).*

2. **What proportion of Universal Digital Loop Carrier (UDLC) versus Integrated Digital Loop Carrier (IDLC) should be used?**

**SYNOPSIS OF TESTIMONY**

Ms. Flatt and Mr. Florence discussed the nature of UDLC and IDLC and why the use of UDLC must be assumed in an unbundled loop cost study. Tr. Vol. 4 at 1116-30 (Flatt Rebuttal); Tr. Vol. 6 at 1536 (Florence Direct); Tr. Vol. 6 at 1540-47 (Florence Rebuttal); Ex. 39 at 5-14 (Florence Rebuttal from Docket No. 6720-TI-160). ✓

**PROPOSED FINDINGS OF FACT**

133. Ameritech Wisconsin's unbundled loop study reflects the use of UDLC because UDLC is, consistent with TELRIC, the least-cost, most-efficient technology for providing unbundled loops served by DLC. Ex. 39 at 6; AW Init. Br. at 66-67, 70-71; AW Reply Br. at 79-80.

134. The individual loops served by an IDLC system are not terminated on the main distribution frame at the central office, and, therefore, are not available for cross-connection by the CLECs. Ex. 39 at 8, 10-11. Rather, with IDLC, the feeder cable on which the individual customer loops are combined is integrated directly into the voice switch. Tr. Vol. 4 at 1120; AW Init. Br. at 65-66, 70; AW Reply Br. at 79.

into the switch. Rather, the customer signals exist only as digital pulses interspersed in the feeder (T1) bitstreams. Tr. Vol. 4 at 1120; AW Init. Br. at 65-66.

136. Unlike IDLC, UDLC provides individual customer lines at the central office for interconnection with the voice switch or another transmission facility. Thus, UDLC allows a loop to be unbundled from the DLC system at the central office. Tr. Vol. 4 at 1117 n.2.

137. The various technologies proposed by the CLECs for unbundling loops served by IDLC are not practicable given the technology deployed in Ameritech Wisconsin's network and/or are not cost-effective. Tr. Vol. 4 at 1117; AW Init. Br. at 72-73; AW Reply Br. at 79-80.

138. Not all of the neighborhood gateways planned for deployment as part of Project Pronto will be configured as IDLC. Indeed, the DSL-capable portions of these gateways cannot possibly be configured as IDLC because they carry only DSL traffic and therefore never connect to a voice switch. Moreover, even some of the voice-capable DLC units will not be configured as IDLC. Tr. Vol. 4 at 1128-29; AW Reply Br. at 80-81.

139. Only about 6% of Ameritech Wisconsin's retail customers are served over IDLC. Tr. Vol. 4 at 1120.

#### **PROPOSED CONCLUSIONS OF LAW**

140. Ameritech Wisconsin's unbundled loop cost study properly assumes that 100% of unbundled loops will be provisioned over UDLC. UDLC is the least-cost, forward-looking technology for extracting unbundled loops served by DLC systems. Using UDLC is the only possible way to cost-effectively extract individual, unbundled loops from DLC systems because

IDLC cannot support unbundled loops. With IDLC, the individual customer signals are integrated directly into the switch and are not accessible for cross-connection at the central office. As the FCC has repeatedly recognized, IDLC-served loops cannot be cost-effectively unbundled (*UNE Remand Order* ¶ 206 n. 399, ¶ 217 & nn. 417-18) and affording access at the central office to individual loops served by IDLC is “difficult, if not impossible.” *Line Sharing Order*, ¶ 69 n.152. The FCC has also rejected a host of proposed technologies for unbundling loops served over IDLC. *UNE Remand Order*, ¶ 217 n. 417. Thus, the use of IDLC should not be assumed in Ameritech Wisconsin’s cost studies, and those studies appropriately assume the use of UDLC.

141. While on a per-loop basis, IDLC is slightly less expensive than UDLC, the Commission declines to require Ameritech Wisconsin to base its unbundled loop rates on the cost of an Ameritech Wisconsin retail loop provided over IDLC. Under such a proposal, Ameritech Wisconsin would be forced to charge the lower IDLC rate for the unbundled loop, even though it would have no choice but to provide that loop via the more expensive UDLC (because IDLC cannot be cost-effectively unbundled). Such an arrangement would therefore prevent Ameritech Wisconsin from recovering the full costs of providing the unbundled loop, and would thus run afoul of Section 252(d).

**(k) Ameritech Wisconsin’s Other Expenses Are Appropriate.**

#### **SYNOPSIS OF TESTIMONY**

Mr. Palmer responded to the CLECs’ decision to contest Ameritech Wisconsin’s recovery of \$0.05 per month per loop for billing system reprogramming, the development of

143. The start-up costs that Ameritech Wisconsin included in its 1996 cost studies have not been recovered, because the demand over which they were spread has not materialized. Tr. Conf. Vol. 3 at 570-71.

144. Since 1996, a number of new UNEs and new UNE requirements have been defined and established (*e.g.*, UNE-P, ULS-ST, xDSL). These were not included in the 1996 cost studies and require additional modifications and methods and procedures. Tr. Conf. Vol. 3 at 570.

#### **PROPOSED CONCLUSIONS OF LAW**

145. Ameritech Wisconsin's recovery of \$0.05 per loop per month to recover the forward-looking expenses associated with billing system reprogramming, the development of methods and procedures, and integrated testing is reasonable, forward-looking and appropriate.

(3) Are there costs associated with or that should be allocated to a HFPL UNE for line sharing?

(a) Are there costs incurred by Ameritech to modify its OSS to implement the unbundling of the HFPL? If so, what is the appropriate price that Ameritech should charge to recover the costs of modifying its OSS to implement the unbundling of the HFPL?

#### **SYNOPSIS OF TESTIMONY**

James R. Smallwood testified regarding Ameritech Wisconsin's proposed OSS modification costs. Tr. Vol. 1 at 19-20 (Smallwood Direct); Tr. Vol. 1 at 28-29 (Smallwood Rebuttal).



#### **PROPOSED FINDINGS OF FACT**

146. Ameritech Wisconsin's proposed recurring HFPL-related OSS modification cost was developed based on the vendor costs of implementing the OSS modification and on a

147. It is reasonable for Ameritech Wisconsin to recover the proposed charge over a three-year period. Tr. Vol. 1 at 20 (Smallwood Direct).

**PROPOSED CONCLUSIONS OF LAW**

148. The *Line Sharing Order* (§144) provides that ILECs are entitled to recover their HFPL-related OSS modification costs from CLECs.

149. Ameritech Wisconsin's proposed price to recover its HFPL-related OSS modification costs is reasonable, accurately represents the costs Ameritech Wisconsin actually will incur for such modifications, and therefore is adopted by the Commission. AW Init. Br. at 78-79; AW Reply Br. at 85-87.

150. We reject the CLECs' proposal to pay nothing for HFPL-related OSS modifications because that proposal is directly contrary to the FCC's unequivocal holding that ILECs are entitled to recover the costs of such OSS modifications from CLECs (*Line Sharing Order*, § 144). AW Init. Br. at 79-80; AW Reply Br. at 85-87. The CLECs' zero price proposal for OSS modifications also is rejected because it violates the Takings Clause and TELRIC principles. AW Reply Br. at 85; AW Reply Br. at 85-87.

151. Although the CLECs argue that they should not pay for HFPL-related OSS modifications, because Ameritech Wisconsin purportedly had to make the modifications for its affiliate, we find that the *Line Sharing Order* permits ILECs to recover the cost of HFPL-related OSS modifications regardless of whether such costs were incurred to enable affiliated CLECs, as well as unaffiliated CLECs, to gain access to the HFPL. Moreover, it is clear that Ameritech

- (b) **Should there be a separate charge to recover nonrecurring costs applicable to the HFPL UNE?**

**SYNOPSIS OF TESTIMONY**

James R. Smallwood testified regarding the nonrecurring and recurring costs applicable to the HFPL UNE. Tr. Vol. 1 at 12-25 (Smallwood Direct); Tr. Vol. 1 at 26-29 (Smallwood Rebuttal); Tr. Vol. 1 at 39-47 (Smallwood Surrebuttal). ✓

**PROPOSED FINDINGS OF FACT**

152. *See* Section I.C.3.c; AW Init. Br. at 80.

153. Ameritech Wisconsin's proposed recurring and nonrecurring charges recover distinct costs, and the costs recovered through Ameritech Wisconsin's nonrecurring charges are not captured in Ameritech Wisconsin's recurring charges. AW Init. Br. at 80.

**PROPOSED CONCLUSIONS OF LAW**

154. Separate charges will be set to recover the recurring and nonrecurring costs applicable to the HFPL UNE. Separate charges are appropriate because the recurring and nonrecurring charges recover distinct costs, and the costs recovered through Ameritech Wisconsin's nonrecurring charges are not captured in Ameritech Wisconsin's recurring charges. AW Init. Br. at 80; AW Reply Br. at 87.

- (c) **What prices should Ameritech Wisconsin charge for the non-recurring and recurring costs applicable to the HFPL UNE?**

**SYNOPSIS OF TESTIMONY**

James R. Smallwood testified regarding the non-recurring and recurring costs applicable to the HFPL UNE. Tr. Vol. 1 at 12-25 (Smallwood Direct); Tr. Vol. 1 at 26-29 (Smallwood Rebuttal); Tr. Vol. 1 at 39-47 (Smallwood Surrebuttal). ✓

Mark Welch testified regarding cosmic frames and frame mounted splitters. Tr. Vol. 1 at 299-301, 304-306 (Welch Surrebuttal). ✓

155. The record establishes that setting the HFPL UNE price at 50% of the UNE loop cost would be appropriate for several reasons. Tr. Vol. 1 at 14, 20-21 (Smallwood Direct); *id.* at 46-47 (Smallwood Surrebuttal); Tr. Vol. 4 at 1442-43, 1448-54, 1458-61 (Carnall Direct); *id.* at 1478-83 (Carnall Rebuttal).

156. There are two dedicated connections on a single loop when a CLEC leases the HFPL, and those two connections – the voice service and the data service – jointly cause the cost of the loop. Tr. Vol. 4 at 1440, 1445-48 (Carnall Direct). In other words, the cost of the loop is a joint cost caused by both the high frequency and low frequency portions of the loop. *Id.* at 1469-77 (Carnall Rebuttal).

157. The TELRIC methodology is of limited value in determining the portion of the loop cost to allocate to the HFPL. Tr. Vol. 4 at 1440-41, 1449-51 (Carnall Direct).

158. The regulated price for the HFPL should replicate the price that would result in a competitive market. In a competitive market, a company would not give away something of value for nothing, nor would a company expect to get something of value for nothing. Pricing should not favor one competitor over another, or one method of providing service over another. Tr. Vol. 4 at 1442-43, 1451-57 (Carnall Direct).

159. Under Sections 242(c) and 252(d)(1) of the 1996 Act, the price of the HFPL UNE (and any other UNE) depends on the cost of providing the UNE, not on the retail charge an end-user pays for voice service. Accordingly, the CLECs' claim that allocation of 50% of the loop cost to the HFPL would purportedly result in "double recovery" of those loop costs is irrelevant.



likely is not recovering the full cost of the loop in retail rates. Tr. Vol. 4 at 1467-69 (Carnall Rebuttal); *id.* at 1493-95 (Carnall Surrebuttal).

161. Ameritech Wisconsin's proposed price of 50% the price of an unbundled loop is *not* discriminatory, despite what the CLECs suggest. Tr. Vol. 4 at 1477-79 (Carnall Rebuttal). To the contrary, the zero price would be discriminatory in several important respects. *Id.* at 1479-83 (Carnall Rebuttal). Among other things, a zero price would be discriminatory *in favor* of data CLECs. Pricing the HFPL at zero would artificially favor one advanced services technology competitor (DSL providers) over other advanced services technology competitors (such as cable modem, direct broadcast, satellite DBS and fixed wireless providers), and would incent against the use of other technologies. In addition to discriminating against other advanced services providers and technologies, a zero price would discriminate against voice CLECs who may want to become providers of the HFPL UNE and against carriers that build their own facilities to provide service.

162. A zero price for the HFPL UNE would discourage facilities-based competition by CLECs as well as continued investment in facilities by Ameritech Wisconsin. Tr. Vol. 4 at 1452-54 (Carnall Direct); *id.* at 1476 (Carnall Rebuttal) .

***Recurring Cross-Connect Charge.***

163. The recurring HFPL cross-connect charge represents the investment required for two tie-cable pairs running between the MDF and an intermediate distributing frame, as well as the terminating block connections that are required to terminate those tie-cable pairs on the

165. Ameritech Wisconsin's cost study appropriately assumes that, on a forward-looking basis, Ameritech Wisconsin will utilize IDFs in 80% of its central offices. Tr. Vol. 1 at 15 (Smallwood Direct).

166. Ameritech Wisconsin's proposed recurring cost for tie cables accurately reflects the cost of the necessary equipment and was developed based on investments using current vendor prices. Tr. Vol. 15-18 (Smallwood Direct).

***Recurring Line-at-a-Time Ameritech Wisconsin-Owned Splitter Charge.***

167. Ameritech Wisconsin's proposed splitter cost complies with TELRIC rules. Tr. Vol. 1 at 14, 18 (Smallwood Direct).

168. Contrary to the CLECs' assertions, we find that the installation factor and fill factor used by Ameritech Wisconsin in developing the recurring line-at-a-time Ameritech Wisconsin-owned splitter charge are appropriate. Tr. Vol. 1 at 45-46 (Smallwood Surrebuttal).

***Nonrecurring Charge for the HFPL UNE (Cross-Connect Jumpers)***

169. Ameritech Wisconsin's proposed nonrecurring charge for the HFPL UNE (cross-connect jumpers) reflects the central office-based cost Ameritech Wisconsin will incur to provision the HFPL UNE. The cost represents the activities associated with the installation and removal of cross-connect jumpers in the central office. Tr. Vol. 1 at 22-23 (Smallwood Direct).

170. It would not be appropriate to require Ameritech Wisconsin's cost study to assume a network design that includes COSMIC frames, because COSMIC frames are not the most efficient technology and are not the forward-looking technology for Ameritech Wisconsin.

mounted splitters and frame mounted splitters are not more efficient than bay-mounted splitters.

Tr. Vol. 1 at 42-43 (Smallwood Surrebuttal); Tr. Vol. 1 at 304-06 (Welch Surrebuttal).

172. Ameritech Wisconsin charges CLECs for both the installation and removal of cross-connect jumpers, because the CLECs are the cost-causer of the work. Tr. Vol. 1 at 27-28 (Smallwood Rebuttal); *id.* at 41 (Smallwood Surrebuttal).

173. The time estimates utilized in Ameritech Wisconsin's HFPL cost study are accurate. Tr. Vol. 1 at 27-28 (Smallwood Rebuttal); Tr. Vol. 1 at 41 (Smallwood Surrebuttal).

#### **PROPOSED CONCLUSIONS OF LAW**

##### ***Monthly Recurring Charge for the HFPL UNE.***

174. The price for the HFPL UNE will be set at 50% of the unbundled loop price (plus the incremental facilities and operations costs caused by sharing the loop). We find this price appropriate for the following reasons: *First*, this price is consistent with TELRIC principles, which recognize that the cost of a loop used to provide both high frequency spectrum services and low frequency spectrum services is a *shared* cost that must be reasonably allocated between the services that cause that cost. AW Init. Br. at 80-83; AW Reply Br. at 88-89.

175. *Second*, setting the price of the HFPL UNE at 50% of the unbundled loop price provides a significant discount to CLECs in comparison to the price they would have to pay for an entire loop, which discount will encourage CLECs to enter the residential market. AW Init. Br. at 80-83; AW Reply Br. at 88-89.

176. *Third*, allocation of 50% of the loop price to the HFPL UNE is consistent with the

legal requirements of Section 252(c) and 252(d)(1), which prohibit consideration of retail rates when setting the price of UNEs. AW Init. Br. at 83-86; AW Reply Br. at 89-96.

178. The CLECs' proposed zero price also is rejected because requiring Ameritech Wisconsin to "give away" the HFPL UNE would be patently unfair, an unconstitutional taking of Ameritech Wisconsin's property, and inconsistent with TELRIC principles. AW Init. Br. at 92-93; AW Reply Br. at 89-96.

179. We also reject the CLECs' proposed zero price for the HFPL UNE because it would be discriminatory in several respects and would seriously distort the competitive market for advanced services, contrary to both sound regulatory policy and the express dictates of Section 706 of the Act. AW Init. Br. at 86-89; AW Reply Br. at 89-96.

180. Finally, the CLECs' proposed zero price for the HFPL UNE is rejected because it would discourage facilities-based competition by CLECs as well as continued investment in facilities by Ameritech Wisconsin. AW Init. Br. at 89-92; AW Reply Br. at 89-96.

***Recurring Cross-Connect Charge.***

181. We find that it is appropriate for Ameritech Wisconsin to charge CLECs for the cost of both tie-cables, because the CLECs are the cost-causer. Tr. Vol. 1 at 14-18 (Smallwood Direct).

182. Ameritech Wisconsin's proposed cross-connect price for tie-cables is reasonable, complies with the FCC's TELRIC rules, accurately reflects the costs of the necessary equipment, and therefore is adopted by the Commission. AW Init. Br. at 94-95; AW Reply Br. at 97.

the FCC's TELRIC rules, and therefore is adopted by the Commission. AW Init. Br. at 95-96; AW Reply Br. at 97.

***Nonrecurring Charge for the HFPL UNE (Cross-Connect Jumpers).***

184. Ameritech Wisconsin's proposed nonrecurring charge for the HFPL UNE (cross-connect jumpers) accurately reflects the central office-based costs Ameritech Wisconsin will incur to provision the HFPL UNE, and therefore is adopted by the Commission. AW Init. Br. at 96-102; AW Reply Br. at 97-98.

185. The Commission rejects the CLECs' argument that Ameritech Wisconsin should deploy frame mounted splitters or, alternatively, that the nonrecurring charge should assume a network design that includes a frame-mounted splitter because (1) Ameritech Wisconsin is *not* deploying frame-mounted splitters and cannot lawfully be required to set prices that assume it is doing so (*First Report and Order*, ¶ 685; *IUB III*, 219 F.3d at 749-751); (2) Ameritech Wisconsin must engineer its network to provide a universe of service, not just DSL service for CLECs; (3) frame-mounted splitters are less cost efficient than bay-mounted splitters; and (4) frame-mounted splitters would lead to premature exhaust of the MDF. AW Init. Br. at 97-102; AW Reply Br. at 97-98.

(d) **Should line sharing be required if a portion of the loop uses fiber?**

**SYNOPSIS OF TESTIMONY**

See Section I.C.6; AW Init. Br. at 102-05.

**PROPOSED FINDINGS OF FACT**

186. See Section I.C.6; AW Init. Br. at 102-05.

withheld creating *any* new unbundling obligations with respect to fiber facilities (or the DSL-related Project Pronto facilities that Ameritech Wisconsin plans to deploy) in favor of conducting additional rulemakings. *Id.* ¶ 12. This Commission will refrain from imposing any such “fiber-sharing” obligation at least until the FCC has fully addressed the issue. AW Init. Br. at 102-05; AW Reply Br. at 98-103.

188. The inherent capabilities of the Project Pronto network also dictate that we reject any requirement that Ameritech Wisconsin “fiber share” over Project Pronto facilities. The planned Project Pronto network carries data and voice transmissions on separate fiber transport facilities, and requiring Ameritech Wisconsin to “fiber share” over Project Pronto facilities by carrying data and voice on the same fiber would force Ameritech Wisconsin to deploy its DSL-related Project Pronto facilities in a manner that it did not intend and, more importantly, in a manner that would be inefficient and more costly. This not only conflicts with the Eighth Circuit’s decisions in *IUB I* and *IUB III*, but is contrary to the FCC’s express goal “of allowing incumbents to deploy whatever network architecture they deem to be more efficient.” *Line Sharing Reconsideration Order*, ¶ 11. *See also* AW Init. Br. at 102-105; AW Reply Br. at 98-103.

(e) **Assuming that the AT&T/Ameritech Arbitration award (05-MA-120) as adopted in the stipulation in the OSS case (6720-TI-160) requires Ameritech to make line splitters available:**

1. **How should Ameritech be required to make line splitters available, e.g. on a line-at-a-time, a shelf-at-a-time, or other basis?**

189. FCC-defined line sharing is where an ILEC provides POTS services and another carrier provides the DSL services over the same local loop facilities. Tr. Vol. 1 at 256 (Welch Direct).

190. The splitter is a passive device that divides the data and voice signals concurrently moving across the loop. Tr. Vol. 1 at 257-58 (Welch Direct).

191. The CLECs and SBC engaged in a collaborative process called the “Line Sharing Trial,” in which consensus was reached to utilize two network architectures for line sharing. The first is where the CLEC purchases, install, owns and maintains a splitter in its collocation arrangements. The second is where Ameritech Wisconsin purchases, installs, owns, inventories and maintains the splitter. The CLECs specifically requested that the ILECs provide ILEC-owned splitters on a line-at-a-time basis, and Ameritech Wisconsin agreed to do so. Tr. Vol. 1 at 256-58 (Welch Direct).

192. The FCC does not require ILECs to own the splitter. *Line Sharing Order*, ¶¶ 76, 146; *Texas 271 Order*, ¶¶ 327-328; *Line Sharing Reconsideration Order*, ¶ 25; Tr. Vol. 1 at 259-61 (Welch Direct).

193. Even though not obligated to do so, Ameritech Wisconsin (at the request of the CLECs) has voluntarily agreed to own the splitter and lease them to CLECs on a *line-at-a-time basis*, subject to certain rates, terms and conditions. Tr. Vol. 1 at 261-64 (Welch Direct).

194. Ameritech Wisconsin has chosen not to provide splitters on a shelf-at-a-time basis for the following reasons: restrictions of Ameritech Wisconsin’s inventory system; frame

basis, when voluntarily provided on a line-at-a-time basis, would lead to these three operational problems. Tr. Vol. 1 at 264-65 (Welch Direct).

195. Splitters are not components of Ameritech Wisconsin's existing network. Rather, they will be installed only to enable a CLEC to line share with Ameritech Wisconsin. Tr. Vol. 1 at 261 (Welch Direct); Tr. Vol. 1 at 389-90 (Colin Direct).

196. Splitters are manufactured by a variety of third parties and are available on the open market from a variety of vendors. CLECs have the same ability to obtain splitters as Ameritech Wisconsin has, simply by placing a purchase order with the same vendors that Ameritech Wisconsin utilizes. Tr. Vol. 1 at 261 (Welch Direct); Tr. Vol. 1 at 389-90 (Colin Direct); *UNE Remand Order*, ¶ 308.

197. Requiring CLECs to provide their own splitter will not hinder their ability to be competitive. Tr. Vol. 1 at 390-91 (Colin Direct).

#### **PROPOSED CONCLUSIONS OF LAW**

198. We find that Ameritech Wisconsin legally cannot be required to provide splitters on a shelf-at-a-time basis when it elects to voluntarily provide them on a line-at-a-time basis. The FCC has held that the splitter is not, and cannot consistent with federal law be classified as, a UNE and that ILECs have no legal obligation, and cannot lawfully be required, to provide splitters to CLECs under any circumstances. This Commission cannot disregard the FCC's rulings by requiring Ameritech Wisconsin to provide splitters on a shelf-at-a-time basis or any other basis. *Line Sharing Order*, ¶¶ 76, 146; *Texas 271 Order*, ¶¶ 327-28; *Line Sharing*



splitters are not elements of Ameritech Wisconsin's existing network (*UNE Remand Order*, ¶ 324; *IUB I*, 120 F.3d at 813); and (2) the splitter does not meet the "necessary" and "impair" standards of Section 251(d)(2) and FCC Rule 317, because CLECs can purchase splitters themselves from the same vendors, and just as readily, as Ameritech Wisconsin. AW Init. Br. at 108-10; AW Reply Br. at 103-05.

200. Aside from the legal reasons for rejecting the CLECs' shelf-at-a-time proposal, we also reject that proposal because of the technical and operational problems associated with shelf-at-a-time provisioning, including: (1) limitations of Ameritech Wisconsin's inventory system; (2) frame exhaust; and (3) inefficient use of capital for both Ameritech Wisconsin and CLECs. AW Init. Br. at 111-16; AW Reply Br. at 105-08.

201. We also reject the CLECs' shelf-at-a-time proposal because it is contrary to sound public policy. If ILECs that voluntarily choose to provide splitters on a line-at-a-time basis are forced to also provide them on a shelf-at-a-time basis, particularly where providing splitters on a shelf-at-a-time basis is inefficient, costly, and operationally impracticable (as the record here establishes), ILECs would have a strong incentive to exercise their option not to provide splitters at all – a result this Commission finds undesirable. AW Init. Br. at 111-16; AW Reply Br. at 105-08.

2. **Should Ameritech be required to provide nondiscriminatory access, at just and reasonable rates, to its OSS systems to support line splitter availability?**

- a. **If so, how should the cost be determined?**

#### PROPOSED FINDINGS OF FACT

202. *See* Sections I.C.3.a and I.C.3.f.1; AW Init. Br. at 116-18.

203. FCC-defined “line splitting” involves *only* the situation where a CLEC purchases and entire unbundled loop and provides its own splitter (or partners with a data CLEC that provides the splitter). In other words, if CLECs wish to line split, the FCC affirmatively requires CLECs to self-supply and collocate their own splitters and establish the necessary CLEC-to-CLEC service arrangements themselves. Ameritech Wisconsin has agreed to (and already does) provide the OSS processes that accommodate FCC-defined line splitting. Tr. Vol. 1 at 270 (Welch Direct); Tr. Vol. 1 at 386 (Colin Direct).

204. The CLECs’ “line splitting” proposal is much different than FCC-defined line splitting. CLEC-defined “line splitting” includes a requirement that Ameritech Wisconsin purchase and install an ILEC-owned splitter and combine the splitter with the unbundled loop and unbundled switch. The FCC does not require ILECs to provide OSS processes to support the CLECs’ “line splitting” proposal. Tr. Vol. 1 at 387 (Colin Direct).

205. Ameritech Wisconsin’s mechanized systems cannot differentiate among multiple CLECs who are sharing the same loop. Rather, they can only inventory the primary lessee of the UNE-P, and cannot track a separate user/sublessee of the HFPL. Accordingly, Ameritech Wisconsin would have to make substantial additional upgrades and enhancements to its databases and systems in order to accommodate CLEC-defined line splitting. Tr. Vol. 1 at 387-89 (Colin Direct).

supply and collocate their own splitters and establish the necessary CLEC-to-CLEC service arrangements themselves), and Ameritech Wisconsin has agreed to do so. *Texas 271 Orders*, ¶ 325; *Line Sharing Reconsideration Order*, ¶ 19; AW Init. Br. at 116-18; AW Reply Br. at 108-09.

207. We further find that Ameritech Wisconsin is *not* required to develop and make available the associated operations support systems and other process to permit CLEC-defined “line splitting.” (*i.e.*, Ameritech Wisconsin *purchases and installs* an ILEC-owned splitter and *combines* the splitter with the unbundled loop and unbundled switch.). *Texas 271 Orders*, ¶ 325; *Line Sharing Reconsideration Order*, ¶ 19; AW Init. Br. at 116-18; AW Reply Br. at 108-09.

208. Moreover, the record establishes that Ameritech Wisconsin would have to make substantial additional upgrades and enhancements to its databases and systems in order to accommodate the CLECs’ “line splitting” proposal. Requiring Ameritech Wisconsin to upgrade its OSS systems in this manner would be akin to requiring Ameritech Wisconsin to build additional facilities or provide a superior network to that which it currently maintains, in violation of *IUB I* and *IUB III*. Tr. Vol. 1 at 387-88 (Colin Direct).

(f) **Assuming that the AT&T/Ameritech Arbitration award (05-MA-120) as adopted in the stipulation in the OSS case (6720-TI-160) requires Ameritech to provide line splitting over UNE-P:**

1. **Should Ameritech be required to provide its line splitters to CLECs under UNE-P arrangements?**

#### **SYNOPSIS OF TESTIMONY**

Mark Welch testified that Ameritech Wisconsin should not be required to provide line splitters to CLECs utilizing the UNE-P. Tr. Vol. 1 at 250-61, 260-71 (Welch Direct); id. at 208.

with a data CLEC that provides the splitter, if they want to engage in “line splitting.” *Texas 271 Order*, ¶ 325; *Line Sharing Reconsideration Order*, ¶ 19.

210. Ameritech Wisconsin is not required to provide the splitter when the voice customer is no longer being served by Ameritech Wisconsin. Tr. Vol. 1 at 269-70 (Welch Direct); *id.* at 308 (Welch Surrebuttal).

211. CLECs can engage in line splitting without using an ILEC-owned splitter. Tr. Vol. 1 at 270-71 (Welch Direct). CLECs who currently provide voice via UNE-P can disaggregate the UNE-P into a separate DSL-capable loop cross-connected to collocation and a separate switch port cross-connected to collocation. The CLECs could then utilize the CLEC-provided splitter (which, as we found above, the CLECs undeniably have the ability to purchase) to “split” the voice and data being provided over the same loop and accomplish line splitting. Tr. Vol. 1 at 270 (Welch Direct).

212. The CLECs’ “line splitting” proposal would require Ameritech Wisconsin to separate currently combined UNEs (UNE DSL-capable loop and the UNE switch port) and recombine those UNEs with a new “UNE splitter.” Tr. Vol. 1 at 270 (Welch Direct).

213. Numerous operational problems would arise if Ameritech Wisconsin were forced to implement “line splitting” as defined by AT&T. Tr. Vol. 1 at 309 (Welch Surrebuttal).

#### **PROPOSED CONCLUSIONS OF LAW**

214. For the same reason set forth in Section I.C.3.e.1, we find that Ameritech Wisconsin is not, and cannot lawfully be, required to provide the splitter to CLECs, including

under the Eighth Circuit's decisions in *IUB I* and *IUB III*, Ameritech Wisconsin cannot be required to provide new combinations of network elements. CLEC-defined "line splitting," however, would improperly require Ameritech Wisconsin to separate currently combined UNEs (UNE DSL-capable loop and the UNE switch port) and re-combine those UNEs with a new "UNE splitter." AW Init. Br. at 119-20; AW Reply Br. at 109.

216. Consistent with FCC decisions, we find that UNE-P CLECs have an affirmative obligation to provide their own splitters, or partner with a data CLEC that provides the splitter, if they want to engage in "line splitting." *Texas 271 Order*, ¶ 325; *Line Sharing Reconsideration Order*, ¶ 19; AW Init. Br. at 118-19; AW Reply Br. at 109.

**2. Where should splitters be placed?**

**SYNOPSIS OF TESTIMONY**

Mark Welch testified regarding splitter placement. Tr. Vol. 1 at 266-68 (Welch Direct); Tr. Vol. 1 at 301-08 (Welch Surrebuttal).



**PROPOSED FINDINGS OF FACT**

217. As a matter of sound engineering principles, splitters should be placed in the common collocation area, not on the MDF. Tr. Vol. 1 at 266-68 (Welch Direct).

218. Frame mounted splitters are not appropriate to use, and are not more efficient than bay mounted splitters. Tr. Vol. 1 at 304-08 (Welch Surrebuttal).

219. The MDF is not designed for mounting splitters, but rather is designed for wiring. Placing splitters on the MDF would lead to faster exhaust of the frame. Frame mounted splitters cannot be efficiently repaired and maintained. Tr. Vol. 1 at 266-67 (Welch Direct).

221. Placing the splitter in the common areas would provide CLECs test access to the HFPL at the splitter 24 hours a day, 7 days a week. Tr. Vol. 1 at 267 (Welch Direct).

**PROPOSED CONCLUSIONS OF LAW**

222. The Commission will not require Ameritech Wisconsin to place splitters on the MDF, because Ameritech Wisconsin (not the CLEC) has the right to determine the particular areas within its central offices where CLECs can collocate their equipment. *GTE*, 205 F.3d at 426. *See also* Fourth Report and Order, *Deployment of Wireline Services Offering Advanced Telecommunications Capability*, CC Docket No. 98-147 at ¶ 90 (August 8, 2001) (“*FCC Collocation Remand Order*”) (“In recognition of the incumbent’s right to use and manage its own property, we find that each incumbent should maintain ultimate responsibility for assigning collocation space within its premises.”) Consistent with the D.C. Circuit’s and the FCC’s rulings, we find that Ameritech Wisconsin must be allowed to manage its own central office floor and frame space to ensure that it is used efficiently and in a safe manner. AW Init. Br. at 122-24; AW Reply Br. at 110-12. We agree with Ameritech Wisconsin that it has no obligation to provide a menu of splitter locations. Tr. Vol. 1 at 266 (Welch Direct); *id.* at 301-02 (Welch Surrebuttal). CLECs have no legal right to dictate where equipment, such as splitters, should be located in Ameritech Wisconsin’s central offices. Tr. Vol. 1 at 302-03 (Welch Surrebuttal).

223. We also reject the CLECs’ proposal that Ameritech Wisconsin be required to place splitters on the MDF, because such placement is *not* more efficient than locating the splitter in the collocation area. Such placement looks at efficiency solely from the narrow

224. We adopt Ameritech Wisconsin's proposal to place splitters in the common areas because, unlike mounting splitters on the MDF, placing splitters in common areas provides CLECs with test access to the HFPL at the splitter 24 hours a day, 7 days a week, as required by the *Line Sharing Order*. AW Init. Br. at 125; AW Reply Br. at 110-12.

225. We reject the CLECs' proposal that costs and prices be based on the assumption that the splitter is located on the MDF because, under *IUB III*, 219 F.3d at 751, any hypothetical network assumption violates the plain language of the Act. Additionally, setting prices at a level that does not permit Ameritech Wisconsin to recover its costs would amount to an unconstitutional taking of Ameritech Wisconsin's property. AW Init. Br. at 125-26; AW Reply Br. at 110-12.

**(g) How should the cost of line splitters and placement be determined?**

See Sections I.C.3.c and I.C.3.f.2; AW Init. Br. at 126.

**(4) What subloop elements should be provided and what subloop elements must be priced?**

**SYNOPSIS OF TESTIMONY**

Mr. Palmer and Mr. Welch discussed the subloop elements that should be provided and the prices for those elements. Tr. Vol. 1 at 310-24 (Welch Surrebuttal); Tr. Vol. 2 at 696-97 (Palmer Direct); Tr. Vol. 2 at 742-44 (Palmer Supplemental Direct).

**PROPOSED FINDINGS OF FACT**

226. Ameritech Wisconsin allows CLECs access to all technically feasible subloop access points in its network. Tr. Vol. 1 at 312; Tr. Vol. 2 at 742-43; AW Init. Br. at 127.

227. It is technically infeasible to access (via a cross-connect) a subloop at the remote

228. In determining its unbundled subloop costs, Ameritech Wisconsin relied on the same investment data developed by LFAM for its unbundled loop cost study. For each technically feasible subloop segment, Ameritech Wisconsin extracted the appropriate equipment and facility component costs that make up that segment from the LFAM unbundled loop results to estimate the cost of that segment. Tr. Vol. 2 at 696-97.

229. Ameritech Wisconsin's subloop cost study does not "double-count" investments in splice cases and terminals. Carving up the loop into subloops and allowing CLECs to interconnect at various points along the loop entails additional costs that are appropriately recovered in the recurring subloop rates. These costs do not arise when providing the whole UNE loop as a single entity. Therefore, simply adding the recurring rates for each of the subloops does not equal the recurring rate for the whole UNE loop. Tr. Vol. 2 at 892; AW Init. Br. at 129.

230. Moreover, not every subloop component occurs on every UNE loop. The UNE loop study accounts for this by including occurrence percentages for each component, and therefore, the UNE loop study includes less than 100% of the cost of these elements. Tr. Vol. 2 at 893; AW Init. Br. at 129.

231. Ameritech Wisconsin's subloop offerings allow CLECs to interconnect to and offer competitive services in multiple-dwelling units ("MDUs") and campus-style arrangements through a single demarcation point. The single demarcation point may be used as a single point of interconnection ("SPOI") for CLECs to gain access to the all of the inside wire and serve all



232. Ameritech Wisconsin also affords CLECs an adequate opportunity to interconnect in MDU and campus environments that have multiple demarcation points. Upon request, Ameritech Wisconsin will construct, pursuant to a special construction arrangement, a SPOI that affords access to all subloops running to all of the units. Tr. Vol. 1 at 319-20, 322, 324-25; AW Init. Br. at 130-31.

#### PROPOSED CONCLUSIONS OF LAW

233. In the *UNE Remand Order*, the FCC defined the subloop as those “portions of the loop that can be accessed at terminals in the incumbent’s outside plant,” and it ordered ILECs to allow access to subloops “where technically feasible.” *UNE Remand Order*, ¶¶ 205, 206. The FCC explained that technically feasible subloop access points are those accessed by a “physical” cross-connect: “An accessible terminal is a point on the loop where technicians can access the wire or fiber within the cable without removing a splice case to reach the wire or fiber within.” *Id.*, ¶ 206.

234. The Commission adopts Ameritech Wisconsin’s subloop cost study. The Commission concludes that Ameritech Wisconsin’s subloop offerings allow CLECs to access the loop where technically feasible. Moreover, Ameritech Wisconsin has voluntarily committed to construct an ECS to allow access to subloops at or near the RT. The Commission also finds that Ameritech Wisconsin’s subloop cost study does not “double-count” loop investments. Rather, it appropriately recovers the additional costs incurred by Ameritech Wisconsin in allowing subloop access, and the UNE loop study includes occurrence percentages for each subloop component to

- (5) To what degree is Ameritech required under federal law and to what degree should it be required under state law to offer extended loops, and collocation of DSLAMs?

*Provision of Enhanced Extended Links*

SYNOPSIS OF TESTIMONY

Ameritech Wisconsin did not submit testimony on this issue.

PROPOSED FINDINGS OF FACT

235. An enhanced extended link, or “EEL,” is a combination of the loop and the interoffice transport UNEs. *UNE Remand Order*, ¶ 477. The EEL itself is not a UNE. *Id.* ¶ 478; AW Init. Br. at 131.

PROPOSED CONCLUSIONS OF LAW

236. Federal law requires that two conditions be met before Ameritech Wisconsin is obligated to provide enhanced extended links (“EELs”) to CLECs. First, the constituent loop and transport UNEs comprising the EEL must *already* be combined in Ameritech Wisconsin’s network. *Iowa Utils. Bd. v. FCC*, 120 F.3d 753, 813 (8<sup>th</sup> Cir. 1997) (“*IUB I*”), *aff’d in part, rev’d in part sub nom. AT&T Corp. v. Iowa Utils. Bd.*, 525 U.S. 366 (1999) (“*IUB II*”); *Iowa Utils. Bd. v. FCC*, 219 F.3d 744 (8<sup>th</sup> Cir. 2000) (“*IUB III*”); *UNE Remand Order*, ¶¶ 476-78, 480, 486.

Second, the CLEC must use the EEL to provide a significant amount of local exchange service to a particular end-user. *In the Matter of Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, Supplemental Order*, CC Docket No. 96-98, FCC 99-370 (rel. Nov. 4, 1999) (“*Supplemental Order*”), ¶ 5; *In the Matter of Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, Supplemental Order*

See Section I.C.(6) below.

- (a) **What connections must be afforded at remote terminals and in the CO to access those elements?**

**SYNOPSIS OF TESTIMONY**

Ameritech Wisconsin did not submit testimony on this issue. ✓

**PROPOSED FINDINGS OF FACT**

237. Collocation is not required for access to EELs. Therefore, no particular connection is required, either at the central office or at the RT, in order for a CLEC to access an EEL. AW Init. Br. at 139.

238. With respect to DSLAMs, the connection Ameritech Wisconsin affords at the central office and RT for collocating a DSLAM are the same connections Ameritech Wisconsin provides CLECs to access an unbundled loop (where the CLEC wants to connect a DSLAM to an unbundled loop) or to connect to the HFPL of a copper loop or subloop (both in the case where Ameritech Wisconsin provides the splitter and in the case where the CLEC provides the splitter). AW Init. Br. at 139.

**PROPOSED CONCLUSIONS OF LAW**

239. The Commission concludes that Ameritech Wisconsin affords the appropriate connections at the central office and RT for collocating a DSLAM. The Commission also finds that collocation is not required for access to EELs.

- (b) **What means of unbundling Digital Loop Carrier (DLC) systems should be required? (i.e. dedicated path or mixed traffic facilities)**

- (c) **Should unbundling requirements be different depending on DLC technology (e.g. IDLC vs. JDL) or loop facilities (e.g. copper vs. fiber)?**

c. **Digital cross-connect grooming?**

d. **Side-door grooming?**

(d) **How should the various unbundling scenarios in (c) and (d) be priced?**

1. **Should the price for unbundling scenarios be determined based on individual scenarios or as a meld?**

2. **As an interim or permanent pricing option should UDLC loop UNEs be priced no higher than IDLC loop UNEs until IDLC unbundling is achieved?**

240. The proposed findings and fact and conclusions of law for Sections I.C.(5)(b)-(d) are those stated above under Section I.C.(2)(j)(2).

(6) **Should Project Pronto architecture be unbundled, including subloops, extended loops, collocation of DSLAMs and packet switching elements?**

#### **SYNOPSIS OF TESTIMONY**

Sherri A. Flatt testified that the Project Pronto architecture should not be unbundled. Tr. Vol. 4 at 1089-114 (Flatt Direct); Tr. Vol. 4 at 1120-30 (Flatt Rebuttal); Tr. Vol. 4 at 1131-69 (Flatt Surrebuttal). ✓

Carol Chapman testified that the Project Pronto architecture should not be unbundled. Tr. Vol. 1 at 104-20 (Chapman Direct); Tr. Vol. 1 at 121-35 (Chapman Surrebuttal). ✓

#### **PROPOSED FINDINGS OF FACT**

241. Project Pronto is a \$6 billion end-to-end network enhancement initiative designed to extend the reach of advanced services to millions of new customers by installing fiber facilities deeper into the network. Tr. Vol. 1 at 104-05 (Chapman Direct); Tr. Vol. 4 at 1089-90 (Flatt Direct). Project Pronto is primarily designed to serve residential consumers and small business customers. Tr. Vol. 1 at 104-05 (Chapman Direct).

242. Project Pronto will not cause Ameritech Wisconsin to proactively migrate existing

243. Project Pronto is an overlay network, and therefore will not replace *any* of Ameritech Wisconsin's embedded network. Tr. Vol. 1 at 112-13 (Chapman Direct).

244. The NGDLC-related portion of Project Pronto involves use of the following facilities, beginning at the end-user's premises: Copper distribution pairs from an end-user customer's premises to the Service Area Interface ("SAI"); SAIs that interface between the copper distribution pairs and copper feeder pairs; copper feeder pairs between an SAI and a Project Pronto remote terminal ("RT"); NGDLC equipment deployed within Project Pronto RTs that, among other things, digitizes and packetizes data signals from the end-user customer and provides the capability to offer both voice (POTS) and data (DSL) services; separate fibers between the RT and the central office for POTS and DSL traffic, respectively; Optical Concentration Devices ("OCDs") deployed in the central office to provide packet switching functionality, including routing and aggregation, for DSL traffic; and, NGDLC Central Office Terminals ("COTs") used to provide POTS connectivity for voice traffic to the ILEC local switch and/or CLEC collocation equipment. Tr. Vol. 4 at 1089-92, 1096, 1111-13 (Flatt Direct).

245. The NGDLC provides DSL capability by performing, among other things, a function similar to that of a DSLAM (including the packetizing of data signals) within the RT site. Tr. Vol. 4 at 1149 (Flatt Surrebuttal).

246. Incoming copper facilities from the end-user customer's premises are terminated on the "backplane" of the NGDLC. Tr. Vol. 1 at 314 (Welch Surrebuttal); Tr. Vol. 4 at 1111 (Flatt Direct). The incoming spectrum from these copper facilities is then routed over a hard-

hardware and software, separates the high-frequency (data) portion of the copper loop from the low-frequency (voice) portion. From this point on, the data and voice transmissions travel on separate fibers. Tr. Vol. 4 at 1108, 1111 (Flatt Direct).

247. The voice transmission path from the RT travels over a separate Time Division Multiplexed (“TDM”) fiber-optic transport facility (an OC-3) to the central office, where it terminates at a separate Central Office Terminal (“COT”). Tr. Vol. 4 at 1111-13 (Flatt Direct).

248. The data transmission, on the other hand, is digitized and packetized by other hardware and software within the NGDLC and transported over a packet switched fiber-optic facility (an OC-3c) to the central office. Tr. Vol. 1 at 313-15 (Welch Surrebuttal); Tr. Vol. 4 at 1091-92, 1111-13 (Flatt Direct).

249. The OC-3c optical signal contains the data signals from numerous end-users, each of which is served by the CLEC of their choice. In other words, the data signals travel over on a Permanent Virtual Path (“PVP”), and individual data packets travel on Permanent Virtual Circuits (“PVCs”) within that path. Once reaching the central office, the fiber transmission path (and the associated PVP) terminates at the OCD, which is an ATM packet switch. The inbound ports on the OCD receive all of the OC-3c optical signals from all of the Project Pronto RT sites served out of that central office. The OCD provides a packet switching, routing and aggregation function for the data traffic, and directs each end-user’s data signal to the appropriate outbound port on the OCD for delivery to that end-user’s chosen CLEC’s collocation arrangement. All such data signals bound for a particular CLEC are aggregated to the OCD’s outbound port

250. The NGDLC equipment at the RT, the fiber transmission path, and the OCD cannot be physically separated from one another, because they are an integrated unit that is effectively “hard wired” together. Tr. Vol. 1 at 313-15 (Welch Surrebuttal); Tr. Vol. 4 at 1091-92, 1111-13 (Flatt Direct).

251. Alcatel is the primary manufacturer of the NGDLCs that Ameritech Wisconsin plans to deploy. Line cards are “proprietary components” of the Alcatel NGDLC and they cannot be substituted with other line cards made by other manufacturers. In fact, use of another manufacturer’s line card, or other sub-component, voids the warranty of the equipment. Additionally, other types of line cards simply will not work in the Alcatel equipment. Tr. Vol. 4 at 1134-36, 1159-60 (Flatt Surrebuttal).

252. Ameritech Wisconsin will offer three wholesale Broadband Services over the Project Pronto architecture. Tr. Vol. 4 at 1093-94 (Flatt Direct); Tr. Vol. 1 at 104-05 (Chapman Direct).

253. The Project Pronto architecture includes packet switching components which the FCC declined to unbundle, except in extremely limited circumstances. Specifically, and as the FCC has found, the NGDLC and OCD facilities that Ameritech Wisconsin plans to deploy perform packet switching functions. *UNE Remand Order*, ¶¶ 302-03; *Project Pronto Order*, ¶ 18.

254. All four conditions of the FCC’s Rule must be satisfied before unbundling can be required, and the conditions by their very nature require a case-by-case analysis. The record

255. The first condition does not exist because Project Pronto is an overlay network that would not replace any existing copper distribution facilities. The second condition does not exist because there is no evidence of a single concrete instance where a CLEC's ability to provide xDSL service was inhibited due to the lack of a spare copper facility. The third condition does not exist because Ameritech Wisconsin allows DSLAM collocation at all of its existing RTs and has committed to allow such collocation in future RTs. The fourth condition does not exist because Ameritech Wisconsin will not use the packet switching equipment for its own use. Tr. Vol. 4 at 1099-1102 (Flatt Direct); *id.* at 1137, 1159 (Flatt Surrebuttal); Tr. Vol. 1 at 107-09 (Chapman Direct); *id.* at 123 (Chapman Surrebuttal).

256. The CLECs contend that the third criteria has been met because Ameritech Wisconsin does not allow CLECs to collocate line cards. The CLECs are wrong because the line card is *not* a DSLAM. Tr. Vol. 4 at 1149-50 (Flatt Surrebuttal).

257. The record establishes that it is not technically possible to unbundle the Project Pronto DSL architecture. The Project Pronto facilities between the end-user's premises and the CO are shared facilities and cannot be unbundled for a CLEC's dedicated use in the manner that the FCC has unbundled other network elements. Tr. Vol. 4 at 1095-99 (Flatt Direct). The end user's service does not occupy an accessible, physical, end-to-end path through the architecture. Tr. Vol. 4 at 1139-40 (Flatt Direct).

258. It also is not physically possible to unbundle the components of the Project Pronto architecture, because of the manner in which the components interact and work with one another.



additional funds, build or install additional equipment and ultimately redesign the planned Project Pronto DSL architecture in order to provide those UNEs. These include the CLECs' proposals for data transmission over TDM circuits, for PVCs and PVPs at every QoS class, and for unbundled copper subloops from the RT to the NID at the customer premise and the SAI. Tr. Vol. 1 at 109 (Chapman Direct); *id.* at 130 (Chapman Surrebuttal); *id.* at 312-15 (Welch Surrebuttal); Tr. Vol. 4 at 1098 (Flatt Direct); *id.* at 1165-68 (Flatt Surrebuttal).

260. The record establishes that the “necessary” and “impair” standards have not been met with respect to Project Pronto. Tr. Vol. 4 at 1102-05 (Flatt Direct); *id.* at 1137 (Flatt Surrebuttal).

261. CLECs are not impaired without unbundled access to the NGDLC or the OCD Port. Tr. Vol. 4 at 1137, 1141-42, 1148 (Flatt Surrebuttal).

262. The CLECs have many options for offering DSL services if Project Pronto is not unbundled. Tr. Vol. 4 at 1104-05 (Flatt Direct); *id.* at 1143-44 (Flatt Surrebuttal). The Broadband Service will not diminish or affect the CLECs ability to provide advanced services by methods currently available to them, but provides yet another option. Tr. Vol. 4 at 1131-32, 1143-44 (Flatt Surrebuttal); Tr. Vol. 1 at 112-13 (Chapman Direct).

263. The Rule 317(b)(2) and (b)(3) factors dictate that the Commission not unbundle Project Pronto. Tr. Vol. 4 at 1093-96, 1104-05 (Flatt Direct); *id.* at 1160-65 (Flatt Surrebuttal); Tr. Vol. 1 at 104, 115-20 (Chapman Direct); Tr. Vol. 1 at 126-28 (Chapman Surrebuttal).

264. Lack of unbundled access to Project Pronto will not harm the advanced services

114-16 (Chapman Direct) (even the FCC has acknowledged that the Broadband Service will benefit competition and consumers).

265. The copper subloop from the RT to the NID and SAI is not a UNE or a combination of UNEs. Tr. Vol. 4 at 1138-39 (Flatt Surrebuttal).

266. The ADLU card is not a UNE. Tr. Vol. 4 at 1139 (Flatt Surrebuttal).

267. Project Pronto has no effect on FCC-required “line sharing,” because Project Pronto is an overlay network architecture that will not replace existing copper loops and copper subloops. Tr. Vol. 4 at 1106-11 (Flatt Direct).

268. Ameritech Wisconsin’s wholesale Broadband Service provides CLECs with the same functional result as FCC-required line sharing. Tr. Vol. 4 at 1111-13 (Flatt Direct).

269. The CLECs’ concern over potential cross-talk problems is speculative and is being evaluated by several standards committees. Tr. Vol. 4 at 1157-58 (Flatt Surrebuttal).

270. There is no physical access to subloops at an NGDLC line card slot, the protector block within an NGDLC RT, or a software cross-connect. Tr. Vol. 4 at 1145-48 (Flatt Surrebuttal); Tr. Vol. 1 at 129-31 (Chapman Surrebuttal).

271. Line cards are not used for interconnection or access to UNEs. Tr. Vol. 4 at 1150-51 (Flatt Surrebuttal).

272. Allowing CLECs to own or control line cards would cause premature physical and bandwidth exhaust of the NGDLC system. Tr. Vol. 1 at 132-33 (Chapman Surrebuttal); Tr. Vol. 4 at 1155-57, 1160-61, 1164-68 (Flatt Surrebuttal); *id.* at 1207-09. (Flatt Cross).

would make the offering less efficient and more expensive, and Ameritech Wisconsin would have no assurance that it would recover the cost of the additional investments.

274. The additional capital investments also would result in delays and increased costs – from both a provisioning and maintenance/repair perspective. Tr. Vol. 4 at 1160-65 (Flatt Surrebuttal); Tr. Vol. 1 at 132-33 (Chapman Surrebuttal).

275. Unbundling Project Pronto and permitting CLEC ownership or control of line cards also would create severe operational problems, introduce inefficiencies into Ameritech Wisconsin's network and cause Ameritech Wisconsin to incur substantial additional costs, none of which would exist if Ameritech Wisconsin were simply allowed to own the line cards, as authorized by the FCC's *Project Pronto Order*. These increased deployment costs likely will result in TELRIC prices for the Project Pronto that are higher than would otherwise be charged for the Broadband service if it were deployed as intended. And, because the CLECs would be under no obligation to purchase the resulting offering (which again would be considerably more expensive) after the modifications were made, Ameritech Wisconsin would have no assurance it would recover its costs. Tr. Vol. 1 at 133-34 (Chapman Surrebuttal); Tr. Vol. 4 at 1155-57, 1160-61 (Flatt Surrebuttal); *id.* at 1207-09. (Flatt Cross).

276. Allowing CLECs to own line cards likely would require Ameritech Wisconsin to deploy a new version of the overall software that runs the entire NGDLC system, including the line cards, and likely would exhaust the OC-3c optical transport, thereby requiring Ameritech Wisconsin to deploy additional OC-3c and OCD ports. However, Ameritech Wisconsin has

277. The Project Pronto architecture utilizes a UBR ATM QoS class, and cannot support PVC and PVPs at all ATM QoS classes. However, Ameritech Wisconsin has committed to evaluate additional features and functions of the Project Pronto architecture. Tr. Vol. 4 at 1136, 1165-68 (Flatt Surrebuttal). Ameritech Wisconsin should not be required to give CLECs unbundled access to PVCs and PVPs. *Id.* at 1136, 1168-69 (Flatt Surrebuttal).

#### **PROPOSED CONCLUSIONS OF LAW**

278. The Commission rejects the CLECs' Project Pronto UNE/line card collocation proposal for several reasons. *First*, we reject the proposal because it conflicts with the national policy set forth in Section 706 of the 1996 Act regarding promotion of advanced services deployment, and therefore is preempted. Specifically, the proposal would deter and likely preclude Ameritech Wisconsin from making the investment necessary to deploy Project Pronto. AW Init. Br. at 158-66.

279. *Second*, the Project Pronto unbundling proposal is rejected because, under the FCC's packet switching unbundling criteria, Ameritech Wisconsin cannot lawfully be required to unbundle its Pronto DSL facilities. It is beyond dispute that the Pronto NGDLCs, the ATM facilities, the OCDs, and the associated transport provide packet switching functionality. The unbundling of such packet switching functionality is governed by the FCC's Rule 319(c)(5), which establishes four conditions that all must exist before the Commission can order Ameritech Wisconsin to unbundle packet switching functionality, and none of the four conditions exist anywhere in Wisconsin. This is most graphically true in the case of condition 3, which requires

terminal is inadequate. Accordingly, this Commission cannot lawfully give the CLECs what they demand. AW Init. Br. at 166-72; AW Reply Br. at 126-39.

280. Notably, Sprint continues to argue that the third condition of the FCC's packet switching rule (which, as stated above, requires that Ameritech Wisconsin refuse to permit DSLAM collocation at RTs) has been met because Ameritech Wisconsin does not permit CLECs to collocate line cards. As the record establishes, a line card is not a DSLAM and therefore the CLECs' attempt to treat it as such for purposes of FCC Rule 319 is rejected. In fact, Sprint's own witness on this issue, Mr. Dunbar, testified in an Illinois proceeding which took place *after* the hearing in this case, that the line card is *not* a DSLAM.<sup>2</sup>

281. *Third*, although the Commission cannot revise or alter the FCC's application of the "impair" test to packet switching facilities and its conclusion that CLECs are not allowed unbundled access to those facilities except in very limited circumstances that do not exist here (*UNE Remand Order*, ¶¶ 313-17; *IUB II*, 525 U.S. at 378 n.6), even if we could independently apply the "impair" test (which we cannot lawfully do), the CLECs have not shown that the Rule 317 requirements for unbundled access to the Pronto DSL facilities have been met. Their unbundling proposal therefore is rejected. AW Init. Br. at 172-201; AW Reply Br. at 153-68.

282. Specifically, the CLECs' argument that the "impair" test has been met relies on unsupported, vague, and subjective claims based on speculation about future network design and future market conditions. The FCC, however, requires an objective, fact-based analysis of existing network facilities and existing market conditions. Given that the pre-existing options

deployment of Project Pronto DSL facilities, and that Ameritech Wisconsin's Broadband Service offerings will provide additional options for providing DSL service, the CLECs' Project Pronto UNE/line card collocation proposal does not satisfy the mandatory federal law "impair" standard. AW Init. Br. at 172-201; AW Reply Br. at 153-68.

283. *Fourth*, the CLECs' Project Pronto "unbundling" and line card "collocation" proposals are rejected because they fail to satisfy the standards of Section 261(c), which requires that any state unbundling requirement be "necessary to further competition" and "not inconsistent with . . . the [FCC's] regulations." The advanced services market is already highly competitive, and CLECs have numerous options for offering DSL services. Accordingly, the CLECs' Project Pronto "unbundling/collocation" proposal is not "necessary to further competition." Moreover, as discussed herein, it clashes head on with relevant FCC regulations. AW Init. Br. at 201-04; AW Reply Br. at 135-36.

284. *Fifth*, we reject the CLECs' Project Pronto "unbundling" and "collocation" proposals because they threaten to illegally require Ameritech Wisconsin to install or construct new facilities solely to meet the CLECs' "unbundling" request, in violation of the Eighth Circuit's holdings in *IUB I* and *IUB III*. AW Init. Br. at 172-77, 204-07; AW Reply Br. at 144-46.

285. Specifically, several of the CLECs' proposed UNEs (including the proposal for data transmission over TDM Circuits, and for PVCs and PVPs at every QoS class) cannot be unbundled or supported using the planned Project Pronto architecture, but would require

system, including the line cards. The CLECs' "collocation" proposal also would cause physical and bandwidth exhaust that ultimately would require Ameritech Wisconsin to deploy additional facilities that otherwise would not be necessary. Under the Eighth Circuit's holdings in *IUB I* and *IUB III* (which holdings are now final and nonappealable), Ameritech Wisconsin cannot be required to deploy new, different, or additional facilities and software. AW Init. Br. at 172-77, 204-07.

286. *Sixth*, the CLECs' line card "collocation" proposal is rejected because it would unlawfully require Ameritech Wisconsin to create new UNE combinations for CLECs. AW Init. Br. at 204 n.127.

287. *Seventh*, we reject the CLECs' line card "collocation" proposal because it would unlawfully allow CLECs to dictate where "collocated" equipment would be placed, in violation of the D.C. Circuit's decision in *GTE Services v. FCC*, 205 F.3d at 426 and the FCC's decision in the *FCC Collocation Remand Order*. In the *FCC Collocation Remand Order*, the FCC concluded "that an incumbent LEC," not the CLECs, "may decide where collocated equipment will be placed within its premises."<sup>3</sup> The FCC further stated that, "[i]n recognition of the incumbent's right to use and manage its own property, we find that each incumbent should maintain ultimate responsibility for assigning collocation space within its premises."<sup>4</sup> AW Init. Br. at 209-10; AW Reply Br. at 172-73.

288. *Eighth*, the CLECs' line card "collocation" proposal is rejected because it would permit the "collocation" of "equipment" that fails to meet the legal standards for collocation

“used” or “useful” for either interconnection or access to UNE.<sup>5</sup> However, the D.C. Circuit vacated and remanded that decision finding that the FCC’s interpretation “diverge[d] from any realistic meaning of the statute,” and suggesting that collocation is “necessary” when it is “required or indispensable to achieve a certain result.” *GTE Service Corp. v. FCC*, 205 F.3d 416, 422 (D.C. Cir. 2000). On remand, the FCC held that equipment is “necessary” for interconnection or access to UNEs “if an inability to deploy that equipment would, as a practical, economic, or operational matter, preclude the requesting carrier from obtaining interconnection or access to unbundled network elements.” *FCC Collocation Remand Order*, ¶21. The “collocation” of line cards does not meet this test. AW Init. Br. at 210-18; AW Reply Br. at 169-71.

289. We find that not only are line cards not “necessary” for interconnection or access, they are not even used for it. Line cards are not connected to any CLEC-owned facilities and hence cannot facilitate interconnection between two networks; for the same reason, they cannot be used to integrate Ameritech Wisconsin’s network facilities in the CLEC’s network facilities – as what happens for example when a CLEC obtains “access” to an unbundled loop by means of a cross connect to equipment that is connected to the CLEC’s switch. Instead, line cards are used solely to dictate the nature of the end-to-end DSL service that the CLECs want Ameritech to provide for them. AW Init. Br. at 210-18; AW Reply Br. at 169-71.

290. Along this same line, we reject the CLECs “collocation” proposal because the line card is not the type of equipment that qualifies for collocation. Under the *FCC Collocation*



‘equal in quality’ interconnection or ‘nondiscriminatory access’ to one or more unbundled network elements.” As stated above, the line card is not used for interconnection or access to UNEs. AW Init. Br. at 210-11.

291. *Ninth*, the CLECs’ Project Pronto UNE/line card collocation proposal is rejected because it would violate Section 253 of the Act, which prohibits any “State or local statute or regulation, or other State or local legal requirement” that “may prohibit or *have the effect of prohibiting* the ability of *any* entity to provide *any* interstate or intrastate telecommunications service.” 47 U.S.C. § 253(a) (emphasis added). Adoption of the CLECs’ proposal would do just that by effectively prohibiting Ameritech Wisconsin from providing the wholesale Broadband Service. AW Init. Br. at 207-08.

292. *Tenth*, aside from the legal reasons set forth above, we reject the CLECs’ proposal because it is not technically feasible, practical, or wise. The components of the Pronto DSL network are interdependent and cannot function if they are separated. Thus, they are not capable of being unbundled such that a CLEC could access any individual element at a physical point (as required by 47 C.F.R. 51.307(a)) or “separate from . . . other network elements” (as required by 47 C.F.R. 51.307(d)) and still have the element provide the same functionality. AW Init. Br. at 172-77; AW Reply Br. at 140-53.

293. Similarly, the CLECs’ line card collocation proposal is technically infeasible. The CLECs agree that ADLU cards not licensed by Alcatel would not work in Alcatel equipment deployed by Ameritech Wisconsin. Moreover, collocation of compatible cards would require

do not seek actual collocation but rather a right to co-engineer Ameritech Wisconsin's Pronto DSL architecture and use the architecture in ways not originally intended, which leads to the serious practical problems noted by Ameritech Wisconsin. AW Init. Br. at 172-77, 218-27; AW Reply Br. at 140-53.

294. We also find it significant that the FCC is currently conducting rulemakings on the very unbundling and collocation issues raised by the CLECs' Project Pronto UNE/line card collocation proposal. Because the FCC's decisions in these dockets will have preemptive effect, we believe that imposing any unbundling or collocation obligations on Ameritech Wisconsin at this time would be unwise, as it would risk conflicting with the FCC's ultimate rulings and policy statements. AW Init. Br. at 227-29.

295. *Finally*, we note that many state commissions have declined to break the Project Pronto architecture into multiple UNEs or to permit the "collocation" of line cards and, in fact, *no* state commission has adopted an unbundling/collocation proposal like the one urged by the CLECs here.

296. Specifically, the Michigan Public Service Commission (MPSC) rejected a CLEC proposal to unbundle the Project Pronto architecture, finding that "Ameritech Michigan's broadband and combined voice and data service offerings will provide immediate opportunities for the provision of DSL services by Ameritech Michigan's separate affiliate and CLECs."<sup>6</sup> The MPSC recently denied petitions for rehearing of that decision.<sup>7</sup>

297. The Connecticut Department of Public Utility Control also ruled against unbundling Project Pronto, stating: “In light of the fact that CLECs have access to the same fiber technology that the Telco uses in Project Pronto, the FCC’s definition of line sharing over copper loops, and the Telco’s inability to split fiber, the Department therefore denies the parties’ request of line sharing over Project Pronto.”<sup>8</sup>

298. Additionally, the New York State commission gave Verizon the right to make an “election” of how to facilitate CLEC provisioning of DSL service over new NGDLCs deployed by Verizon. Specifically, the New York commission gave Verizon the option of allowing line card “collocation” or offering a wholesale broadband service similar to that offered by Ameritech Wisconsin.<sup>9</sup> On rehearing, Verizon informed the commission that it was proceeding with the latter option of offering a wholesale DSL service for CLECs.<sup>10</sup>

299. The Pennsylvania Commission similarly faced requests for unbundling, and rejected an Administrative Law Judge’s recommendation to require Verizon to unbundle its new NGDLCs and permit CLECs to install their own line cards in the RT. Rather, the Pennsylvania Commission adopted Verizon’s Best and Final Offer on the issue of line sharing over fiber – its commitment to make subloops available and to participate in further negotiations regarding other

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<sup>8</sup> Decision, *Application of the Southern New England Telephone Company for a Tariff to introduce Unbundle Network Elements*, Docket No. 00-50-60 at 21 (Conn. Dept. of Pub. Util. Control, June 13, 2001) (emphasis added).

<sup>9</sup> Opinion and Order Concerning Verizon’s Wholesale Provision of DSL Capabilities,

possible approaches.<sup>11</sup> The Pennsylvania Commission, finding that “[t]he technical aspects of the issues presented by the parties in this area remain unclear” and that “technology developments in this area are occurring at a rapid pace,” declined to resolve matters on its own, but rather decided that “it appears that a technical conference relating to this issue would be appropriate.”<sup>12</sup>

300. Most recently, in a rehearing proceeding in Illinois, the hearing examiner recommended that the Commission *not* create multiple Project Pronto UNEs or permit the “collocation” of line cards. Rather, the hearing examiner recommended that Ameritech Illinois file a tariff offering the Broadband Service as an end-to-end UNE.<sup>13</sup> Similarly, in an Arbitration proceeding in Texas, the arbitrators required SWBT to unbundle only the end-to-end Broadband Service.<sup>14</sup>

301. Although for the reasons stated above and, in particular, under the FCC’s packet switching rule, we believe the Illinois and Texas commissions went too far in requiring the ILEC to provide the Broadband Service as an end-to-end UNE, the point is that *no* state commission

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<sup>11</sup> Opinion and Order, *Petition of Covad Communications Company for an Arbitration Award Against Bell Atlantic-Pennsylvania, Inc., Implementing the Line Sharing Unbundled Network Element, Petition of Rhythms Links, Inc., for an Expedited Arbitration Award Implementing Line Sharing*, Dockets No. A-310696F0002 and No. A-310698F0002 at 18-19 (Penn. Pub. Util. Comm’n, Nov. 15, 2000).

<sup>12</sup> *Id.*

<sup>13</sup> Proposed Order on Rehearing, *Illinois Bell Telephone Company, Proposed Implementation of High Frequency Portion of Loop (HFPL)/Line Sharing Service*, Docket No. 00-0393 at 34 (Ill. Commerce Comm’n, August 10, 2001).

has broken Pronto into multiple UNE or permitted the collocation of line cards, and neither will we. As stated above, such burdensome unbundling/collocation requirements would violate the law in several respects, would be technically and economically infeasible, and would serve only to deter (and likely preclude) Ameritech Wisconsin from making the investment necessary to deploy Project Pronto in Wisconsin.

- (a) **Should Ameritech's broadband and combined voice and data service offerings be made available and priced according to UNE methodology? Should they be available as part of the UNE-P offering?**

#### **SYNOPSIS OF TESTIMONY**

Carol Chapman testified that Ameritech Wisconsin would price the Broadband Service at TELRIC rates. Tr. Vol. 1 at 128-29 (Chapman Surrebuttal). ✓

#### **PROPOSED FINDINGS OF FACT**

302. Ameritech Wisconsin has agreed to state commission-established TELRIC rates for its Broadband Service offering, even though the service is not a UNE. Tr. Vol. 1 at 128-29 (Chapman Surrebuttal).

#### **PROPOSED CONCLUSIONS OF LAW**

303. Pursuant to Ameritech Wisconsin's voluntarily commitment, the Broadband Service will be priced in accordance with the applicable federal TELRIC-based pricing rules. AW Init. Br. at 229.

- (b) **If Ameritech must unbundle certain packet switching elements, which ones and/or under what circumstances?**

1. **How does Project Pronto include packet switching?**
2. **Is NGDLC a form of packet switching?**

1. Is it sufficient to provide a CLEC the ability to purchase an engineered control splice (ECS) in the field in order to collocate its own DSLAM near the Project Pronto Next Generation Digital Loop Carrier (NGDLC)?
2. Alternatively, should a CLEC be allowed to collocate its own line card in the NGDLC?

*See* Section I.C.6 above; AW Init. Br. at 230-31.

3. Should CLECs be:
  - a. Required to establish their own physical path from a DSLAM or a UDLC device in the field to the central office or
  - b. Provided access to an IDLC connection?

**In answering this question the following determinations need to be made:**

- i. Can this IDLC traffic be routed to a CLEC?
- ii. If IDLC traffic cannot be routed to a CLEC, should a CLEC be given rates based on the more efficient IDLC technology?

#### **SYNOPSIS OF TESTIMONY**

Sherri A. Flatt testified regarding IDLC and UDLC traffic. Tr. Vol. 4 at 1116-30 (Flatt Rebuttal). ✓

#### **PROPOSED FINDINGS OF FACT**

304. *See* Section I.C.5.

305. NGDLC may be deployed in either an IDLC configuration or in a UDLC configuration. Ameritech Wisconsin will deploy Project Pronto NGDLC systems in an IDLC configuration; however, some Project Pronto NGDLC systems will also be deployed and configured as UDLC. Tr. Vol. 4 at 1116-20 (Flatt Rebuttal).

306. IDLC is the least cost, most efficient means of provisioning bundled loops for

307. IDLC cannot be efficiently or cost effectively unbundled. The alternatives for unbundling loops provisioned with IDLC set forth by the CLECs are without merit. Tr. Vol. 4 at 1120-26 (Flatt Rebuttal).

308. The FCC has acknowledged that it is not technically feasible to unbundle loops served by IDLC. Tr. Vol. 4 at 1126-28 (Flatt Rebuttal).

#### **PROPOSED CONCLUSIONS OF LAW**

309. The Commission will not require Ameritech Wisconsin to establish unbundled loop costs assuming the use of IDLC technology. Tr. Vol. 4 at 1128-30 (Flatt Rebuttal).

4. **If Ameritech is not required to provide collocation of the line card in its NGDLC, then should Ameritech:**
  - a. **Be required to offer its Broadband Service that uses Project Pronto architecture as an end-to end unbundled element?**
  - b. **Be allowed to make its Broadband Service offering available at rates of its own choice?**
  - c. **Have the option to change its pricing method from the cost-based prices offered in this docket?**

#### **SYNOPSIS OF TESTIMONY**

Carol Chapman testified that the Broadband Service should not be unbundled as an end-to-end UNE, and that Ameritech Wisconsin agrees to price the Broadband Service at TELRIC rates. Tr. Vol. 1 at 104-07, 116 (Chapman Direct); *id.* at 128-29 (Chapman Surrebuttal) ✓

#### **PROPOSED FINDINGS OF FACT**

310. Ameritech Wisconsin's Broadband Service is not a UNE or combination of UNEs. Tr. Vol. 1 at 104-07, 116 (Chapman Direct).

311. Ameritech Wisconsin has agreed to state commission-established TELRIC rates

312. The Commission declines to require Ameritech Wisconsin to offer the Broadband Service as an end-to-end UNE. Such a requirement would suffer from the same legal infirmities as the CLECs' request that the Commission establish multiple UNEs. *See* Section I.C.6 above. Moreover, from a pricing perspective, there is no reason to require that the end-to-end Broadband Service be offered as an end-to-end UNE, because Ameritech Wisconsin already has agreed to offer the Service at TELRIC-based prices set in accordance with the governing federal pricing rules. AW Init. Br. at 232-33.

- (d) **Whether offered as separate UNEs, an end-to-end unbundled element, or as a voluntary offering only, has Ameritech appropriately priced the elements of the Project Pronto architecture using TELRIC methodology?**

#### **SYNOPSIS OF TESTIMONY**

Cherylann Mears testified regarding the Broadband Service cost studies. Tr. Vol.1 at 407-18 (Mears Direct); *id.* at 419-26 (Mears Surrebuttal).

#### **PROPOSED FINDINGS OF FACT**

313. The Broadband Service rate elements were developed in two phases. The Phase I cost studies provide the results for the data portion of the service. The Phase II cost studies provide the results for the voice and data combined loop. Tr. Vol. 1 at 407-18 (Mears Direct).

314. Ameritech Wisconsin has appropriately identified all costs for the elements being studied, and the results of the studies reflect forward-looking TELRIC costs. Tr. Vol. 1 407-18 (Mears Direct); *id.* at 419-426 (Mears Surrebuttal).

315. The concerns raised by Mr. Starkey are invalid. Tr. Vol. 1 at 419-23 (Mears Surrebuttal).



317. Ameritech Wisconsin has appropriately priced the Broadband Service, and the Commission therefore approves those prices. AW Init. Br. at 233-35.

- (7) **Should special construction charges be assessed for the provisioning of unbundled loops and, if so, how should those special construction charges be determined?**
  - (a) **Should CLECs be charged special construction or any other facilities modification charges for complex modifications? (including build-arounds)**
    - 1. **If special construction charges are appropriate, should the charges be assessed as recurring charges or nonrecurring charges?**
    - 2. **If special construction charges are appropriate, is it appropriate to develop standardized rates or time and material rates?**
    - 3. **How should those rates be determined?**
  - (b) **Should CLECs be charged special construction or any other facilities modification charges for IDLC/UDLC interconnections?**
    - 1. **If special construction charges are appropriate, should the charges be assessed as recurring charges or nonrecurring charges?**
    - 2. **If special construction charges are appropriate, is it appropriate to develop standardized rates or time and material rates?**
    - 3. **How should those rates be determined?**

#### SYNOPSIS OF TESTIMONY

Ms. Flatt provides background as to integrated digital loop carrier ("IDLC") facilities, and explains why they cannot be unbundled in the same manner that traditional loops can. *See* Tr. Vol. 4 at 1115-30 (Flatt Rebuttal). ✓

Ms Heritage's testimony describes the methods by which Ameritech addresses the unique characteristics of IDLC in furnishing unbundled loops, those aspects of Ameritech's Facilities

#### PROPOSED FINDINGS OF FACT

318. Unbundling a loop served by IDLC is quite different from unbundling a traditional individual loop. Individual loops have their own connection to the Ameritech switch, so that connection can be moved to a CLEC switch. An IDLC loop, though, shares a connection with many other loops. Tr. Vol. 4 at 1120. That connection cannot be moved without disturbing the other loops attached to the IDLC, which still belong to Ameritech. Thus, unbundling an IDLC loop requires Ameritech to remove the requested loop and place it on a parallel non-IDLC facility (either a traditional loop or a UDLC) that has its own separate connection.

319. In most cases this can be done without incurring extra costs, either by moving the loop to a non-IDLC facility that is already in place and not in use, or by having the loop trade places with a non-IDLC loop that is in use but can be moved to Ameritech's IDLC. Tr. Vol. 6 at 1964-65. Alternatively, the CLEC can avoid the need to unbundle the IDLC loop by using resale, the UNE platform, or sub-loop unbundling, or by constructing its own facilities, to serve the end user. *Id.*

320. Rather, this issue deals only with the situation that arises less than one percent of the time (Tr. Vol. 6 at 1965): where there is no non-IDLC facility on which the requested IDLC loop or loops can be placed but the CLEC nonetheless asks Ameritech to design and construct such a facility. The dispute is whether Ameritech should be compensated for the costs it incurs, which are caused by the CLEC that asks for the work to be done and uses the facility that has been created.

of providing the . . . network element.” Interpreting the Act, the FCC’s *First Report and Order* (¶ 384) was equally unequivocal in stating that, while incumbent LECs must provide unbundled access to loops served by IDLC, the cost of “separating out individual loops from IDLC facilities . . . . will be recovered from requesting carriers.” Likewise, the Eighth Circuit – in its capacity as a Hobbs Act court with exclusive authority to review the FCC’s pricing rules – has held that incumbent LECs are entitled to recover the cost of providing, and if necessary modifying, their existing facilities to provide unbundled access. *Iowa Utilities Board III*, 219 F.3d at 750-51.

322. The Commission further finds that Ameritech’s standard prices for unbundled loops do not include the costs associated with unbundling IDLC. Those prices, and the supporting cost studies, are also before the Commission in this proceeding. Ameritech’s cost studies assume a “least cost” network for a multiple carrier environment, *i.e.*, one in which there is no IDLC, and by definition none of the unbundling costs that are unique to IDLC. The CLECs not only acknowledge but strenuously object to the UDLC assumption and insist that the cost studies should assume a network constructed entirely with IDLC facilities, a claim the Commission has rejected elsewhere in this opinion.

323. Given that Ameritech’s standard loop prices do not reflect the cost of unbundling IDLC, the Commission finds Ameritech’s proposal to implement the Act’s requirement that requesting carriers bear such cost, by assessing a separate charge under its Facilities Modification Policy, to be reasonable. The only alternative would to subsidize the requesting

Either result is barred by the Act's command that the cost of "providing the specifically requested existing network elements that the competitor will in fact be obtaining for use . . . must be the basis for the charges" (*Iowa Utilities Board III*, 219 F.3d at 751) and by the *First Report and Order*'s holding (§ 384) that unbundling costs must be borne by "requesting carriers," not by other carriers or the incumbent.

324. The Commission rejects the CLEC contention that they cannot make a profit on end users served by IDLC if they have to bear the cost of serving such customers, the way the 1996 Act requires them to do. Ameritech offers CLECs several alternatives for serving IDLC end users without incurring the cost of unbundling the end users' loops. At any rate, the outcome the CLECs protest – the possibility that the revenues from serving a customer will not cover the costs required to serve that customer – is the same one any business faces in a competitive market, and it is exactly the outcome dictated by Congress. The Act was not designed to promote inefficient entry, nor was it intended to force incumbent LECs to guarantee profits to their competitors for whatever customers they decided to serve. Rather, the Act requires CLECs to pay incumbents for "the cost . . . of providing the . . . network element" requested (47 U.S.C. § 252(d)(1)(A)), and the FCC has expressly held such cost to include that of "separating out individual loops from IDLC facilities" (*First Report and Order*, § 384).

(c) **Should CLECs be charged special construction or any other facilities modification charges for constructing new facilities?**

1. **If special construction charges are appropriate, should the charges be assessed as recurring charges or nonrecurring charges?**

Ms. Heritage describes Ameritech's Facility Modification Policy with respect to "new build" work. Tr. Vol. 6 at 1947-56, 1965-67 (Heritage Direct); *id.* at 1985-92, 2000-06 (Heritage Surrebuttal). ✓

Mr. Florence demonstrates that the cost of "new build" work is not included in Ameritech's cost studies, which are based on the cost of providing access to Ameritech's existing network. Tr. Vol. 6 at 1630 (Florence Surrebuttal). ✓

#### **PROPOSED FINDINGS OF FACT**

325. A CLEC may submit an order that would require the construction of new facilities. Ameritech has proposed to review such orders under its Facilities Modification Policy, and in some cases it may offer to construct the facilities (the Policy refers to such situations as "new builds"). The issue here is whether Ameritech can assess a separate charge to recover the cost of construction from the requesting carrier. Ameritech's Facility Modification Policy refers CLECs to PSCW-approved retail tariffs, thus providing for such cost recovery where Ameritech would assess construction charges on its own retail customers. Tr. Vol. 6 at 1967, 2000-01.

#### **PROPOSED CONCLUSIONS OF LAW**

326. The Commission agrees with Ameritech's proposal that it charge for "new builds" in the same manner that it charges for similar work under its retail tariffs. That approach is nondiscriminatory: Given that Ameritech pays for constructing its own facilities for its own operations, it is only fair that CLECs ultimately bear the cost of constructing facilities for their operations. The carrier that requests construction and uses (and profits from) the facilities constructed should pay the associated cost. Further, any CLEC that wants to pass the cost of construction on to its end users would have the added benefit of knowing that Ameritech would

on the pricing rules of the 1996 Act, and the Act requires only access to *existing* facilities. The Act does not require incumbent LECs to construct new facilities, and *a fortiori* its pricing rules do not and could not reflect such construction. Tr. Vol. 6 at 1630.

328. Moreover, the CLEC proposal would create an arbitrage opportunity that would nullify Ameritech's PSCW-approved retail tariffs. Tr. Vol. 6 at 2001. To illustrate, assume that a developer asks Ameritech to construct new facilities at a cost of \$25,000. Under its tariffs, Ameritech would charge the developer \$25,000 for the new construction. Under the CLEC proposal, a CLEC could force Ameritech to do the exact same construction at *no* charge. The CLEC could then undercut Ameritech by charging the developer something less than \$25,000 for the same work, and win the customer – not because of better quality or efficiency but solely because regulation had forced Ameritech to absorb costs that benefit the CLEC.

(8) **Should Ameritech Wisconsin be permitted to assess charges for costs of loop conditioning? If so:**

(a) **What costs of loop conditioning should be recoverable?**

#### SYNOPSIS OF TESTIMONY

Mr. Smallwood's testimony describes the FCC orders that require the requesting carrier to bear the cost of loop conditioning. Tr. Vol. 1 at 29-33 (Smallwood Rebuttal). ✓

Ms. Heritage testifies about Ameritech's procedures and policies with respect to conditioning, and about pertinent FCC orders on the subject. Tr. Vol. 6 at 1953-63 (Heritage Direct); *id.* at 1968-75 (Heritage Rebuttal); *id.* at 1976-96, 2004-06 (Heritage Surrebuttal); *id.* at 2007-11 (Heritage Supp. Surrebuttal). ✓

Mr. Florence shows that the cost studies that support Ameritech's proposed standard loop prices assume a feeder/transport network constructed entirely of fiber, using the Universal Digital Loop Carrier model, and do not include traditional copper loops. Tr. Vol. 6 at 1630-34 (Florence Surrebuttal). ✓

329. Many of the loops in Ameritech's existing network are made of copper, and they have been engineered and constructed to carry voice traffic. A CLEC may, however, want to use the loop to carry high-speed data traffic. Accordingly, the CLEC may ask Ameritech to "condition" the loop: that is, to remove certain features (such as load coils, bridged tap, and repeaters) that are designed to facilitate voice service but inhibit data traffic.

330. The first issue is whether Ameritech is entitled to recover, in some manner, the cost of such conditioning; the Commission addresses the methodology for such recovery below. The cost studies that support Ameritech's proposed standard loop prices assume a feeder/transport network constructed entirely of fiber, using the Universal Digital Loop Carrier model. The cost studies do not include traditional copper loops. Thus, by definition, they do not include features like load coils and bridged tap (which are unique to copper loops and are designed to enhance voice traffic), and do not reflect the costs of removing those items or conditioning the loop (Tr. Vol. 6 at 1729). Accordingly, Ameritech proposes to assess a separate charge for conditioning on the carrier that requests it. As a condition of the FCC's approval of the SBC/Ameritech merger, Ameritech has agreed to condition most loops that require conditioning and are less than 12,000 feet long at no charge, and its FMOD Policy reflects that commitment. *Id.* at 1955-56.

#### **PROPOSED CONCLUSIONS OF LAW**

331. The FCC has repeatedly held that a carrier that wants conditioning must also pay for it. In the *First Report and Order* (§ 382), it concluded:

however, bear the cost of compensating the incumbent LEC for such conditioning.

332. The FCC reaffirmed this principle of cost recovery in the *UNE Remand Order*.

There, it reiterated that incumbent LECs should charge for conditioning loops, even if that involves the removal of features that would not be installed if the loop were constructed using present-day technology:

In the Local Competition First Report and Order, the Commission also stated that requesting carriers would compensate the incumbent LECs for the cost of conditioning the loop. Covad and Rhythms argue that, because loops under 18,000 feet generally should not require devices to enhance voice- transmission, the requesting party should not be required to compensate the incumbent for removing such devices on lines of that length or shorter.

We agree that networks built today normally should not require voice-transmission enhancing devices on loops of 18,000 feet or shorter. Nevertheless, the devices are sometimes present on such loops, and the incumbent LEC may incur costs in removing them. Thus, under our rules, the incumbent should be able to charge for conditioning such loops.

*UNE Remand Order*, ¶¶ 192-93 (Footnotes omitted.)

333. The FCC has held that this principle applies with equal force for conditioning that is performed to permit sharing of loops between voice and data carriers:

We conclude that, except in specific circumstances, incumbent LECs must condition loops to enable requesting carriers to provide xDSL-based services on the same loops the incumbent is providing analog voice service, regardless of loop length. We emphasize that shared line xDSL service deployed according to national standards will not impair voice services. . . .

. . . . Finally, consistent with our conclusion in the Local Competition Third Report and Order, we conclude that incumbent LECs should be able to charge for conditioning loops when competitors request the high frequency portion of the loop.



334. The FCC's holdings are fully consistent with the Eighth Circuit's decision that loop prices must reflect "the cost of providing the actual facilities and equipment that will be used by the competitor." *Iowa Utilities Board*, 219 F.3d at 751.

335. The Commission agrees that Ameritech's proposal to assess a separate charge for conditioning is reasonable and fair: A carrier should pay for conditioning only if it wants conditioning, not if it takes the loop "as is" to provide voice service. It is also consistent with the FCC's determination that conditioning costs should be borne by "[t]he requesting carrier." *First Report and Order*, ¶ 382.

336. The Commission agrees with the CLEC contention that conditioning costs are *not* included in standard loop prices (which assume a digital fiber feeder/transport network that does not require conditioning) but disagrees with their contention that a separate charge for conditioning would be inconsistent with the TELRIC pricing model. Above and beyond the fact that the Eighth Circuit vacated TELRIC in favor of prices based on actual cost, the FCC expressly authorized cost recovery for conditioning notwithstanding its adoption of TELRIC as a general pricing rule – in fact, the FCC adopted the specific rules for recovery of conditioning costs in the very same *First Report and Order* that adopted TELRIC. And it specifically reaffirmed its rules on conditioning in the *UNE Remand Order*, even as it acknowledged that conditioning would not be necessary for loops built today. Thus, the CLECs' argument simply amounts either to a collateral attack on the FCC's pronouncements, or the position that the FCC must not really have meant what it so plainly and repeatedly said. Tr. Vol. 1 at 30 The

recovery. As the CLECs themselves acknowledge, conditioning is by definition unnecessary in the hypothetical, digital fiber feeder network on which Ameritech's standard loop prices are based. Indeed, the data-inhibiting features of traditional voice loops do not exist in that hypothetical network. Thus, it would be unnecessary to install or remove those features, and impossible for such a network (and the standard loop prices based on that hypothetical network) to reflect the cost of their installation or removal.

**(b) What rates are reasonable for loop conditioning?**

1. **Should costs be recovered as recurring or nonrecurring charges?**
  - a. **Should nonrecurring charges be established to recover loop conditioning costs be applied to all UNE loop orders for which such costs are possible or only those orders on which such costs are actually incurred?**
  - b. **Should loop conditioning costs be included in maintenance factors?**
2. **Is it appropriate to establish standardized rates or time and material rates?**
3. **How should those rates be determined?**

**SYNOPSIS OF TESTIMONY**

Mr. Smallwood presents Ameritech's proposed rates for conditioning, describes the supporting cost studies, and describes the deficiencies in the competing CLEC-sponsored cost studies. Tr. Vol. 1 at 25 (Smallwood Supp. Direct); *id.* at 33-38 (Smallwood Rebuttal).

✓

Mr. Welch describes the cost studies supporting Ameritech's rates for conditioning and rebuts the assumptions underlying the CLEC cost studies. Tr. Vol. 1 at 275-91 (Welch Rebuttal).

✓

Ms. Heritage discusses pertinent FCC decisions with respect to rates for loop conditioning. Tr. Vol. 6 at 1068-75 (Heritage Rebuttal); *id.* at 1076-88 (Heritage Supp. Direct).

✓

338. Given the Commission's holding that the 1996 Act requires cost recovery for conditioning, there remains only the questions of implementation: the amount of cost and the timing and procedure for recovery. As for the amount of conditioning cost, the Ameritech has proposed prices that are based on time studies of the actual tasks required, and they reflect observation and interviews of the field personnel that actually do the conditioning work. The CLECs propose competing prices, and time studies, that are significantly lower than those of Ameritech.

339. With respect to timing, Ameritech proposes that the requesting carrier pay the price for conditioning at the same time the costs are incurred – namely, by a single non-recurring charge assessed at the time the work is performed. The CLECs propose to spread cost recovery over recurring charges.

340. Finally, Ameritech proposes that conditioning be charged only on those loops for which conditioning is requested. The CLECs propose to spread the cost of conditioning over all loops – including voice loops for which the CLEC does not need or request conditioning.

#### **PROPOSED CONCLUSIONS OF LAW**

341. The Commission adopts Ameritech's proposed prices, as they are based on time studies of the actual tasks required to properly and safely condition a loop, and they reflect extensive observation and interviews of the field personnel that actually do the conditioning work. The cost studies were also reviewed by the Staff of the Missouri commission, which made 15 field visits to observe and time conditioning activities and concluded that the time estimates

For example, the CLECs allocate only 15 minutes for ventilating gas *and* pumping water out of manholes (conditioning can require a technician to open and enter one or more manholes), and no time at all for placing safety signs around the work location. *Id.* at 280-84.<sup>15</sup>

342. With respect to timing, the Commission concludes that CLECs should pay the price for conditioning at the same time the costs are incurred – namely, by a single non-recurring charge assessed at the time the work is performed. The Commission rejects the CLEC’s proposal to spread cost recovery over recurring charges, which would turn Ameritech into a captive finance company for all CLECs. Tr. Vol. 1 at 37. Given that the CLECs are under no obligation to keep conditioned loops, and can thus discontinue their lease and paying the associated recurring charges at any time, the likely result of their proposal is that Ameritech would never recover its conditioning costs.

343. The same principle of matching compensation and cost requires that conditioning be charged only on those loops for which conditioning is requested. Spreading the cost of conditioning over all loops – including voice loops for which the CLEC does not need or request conditioning – would force CLECs and end users that do not benefit from conditioning (such as those that provide or use only voice service) to subsidize data LECs that do. Tr. Vol. 6 at 1989. The FCC has thus held that conditioning costs should be borne by “[t]he requesting carrier” (*First Report and Order*, ¶ 382); likewise, in the context of line sharing, the FCC has ruled that “incumbent LECs should be able to charge for conditioning loops *when competitors request the high frequency portion of the loop*,” (*Line Sharing Order*, ¶ 87) (emphasis added) not when

- (9) **Should Ameritech be permitted to assess costs for Loop Qualification?**
- (a) **If so, how should the reasonableness of those costs be determined?**
- (b) **If so, should the costs be recovered through a recurring charge or a non-recurring charge?**
- (c) **What should those rates be?**

**SYNOPSIS OF TESTIMONY**

Ameritech Wisconsin has not submitted a separate study relating to the costs it incurs in connection with loop qualification. ✓

**PROPOSED FINDINGS OF FACT**

344. Ameritech Wisconsin did not submit a separate cost study relating to the costs it incurs in connection with loop qualification. AW Init. Br. at 247; AW Reply Br. at 186.

**PROPOSED CONCLUSIONS OF LAW**

345. Since Ameritech Wisconsin did not submit a separate cost study relating to the costs it incurs in connection with loop qualification, the Commission does not need to decide any issues pertaining to loop qualification.

**D. Switch Related Issues**

- (1) **How should switching cost inputs be calculated?**

**SYNOPSIS OF TESTIMONY**

Mr. Palmer described how Ameritech Wisconsin used the ARPSM model to calculate its switching cost inputs at Tr. Vol. 2 at 698-711 (Palmer Direct). ✓

**PROPOSED FINDINGS OF FACT**

346. Ameritech Wisconsin calculated its ULS cost study inputs by using the Ameritech Regional PIP Switching Model ("ARPSM"). Ameritech currently buys switching equipment and

#### **PROPOSED CONCLUSIONS OF LAW**

347. The Commission finds that the methodology of Ameritech Wisconsin's ARPSM model is appropriately designed to meld the various prices contained in the two contracts Ameritech has with each of its switch vendors and compute the single, implicit price for switching. While the CLECs dispute some of the inputs of the ARPSM model, the CLECs do not challenge its underlying methodology.

##### **(a) What is the appropriate contract price to use?**

1. Should the prices established in current contracts be used, or would different prices be more reasonable for a complete rebuild?

#### **SYNOPSIS OF TESTIMONY**

Mr. Palmer explained why the appropriate contract prices should be those taken from Ameritech Wisconsin's current contracts at Tr. Conf. Vol. 3 at 508-09 (Palmer Rebuttal). ✓

#### **PROPOSED FINDINGS OF FACT**

348. A forward-looking cost analysis should examine the prices that Ameritech Wisconsin can be expected to pay for the switching equipment it will purchase in the future. Tr. Conf. Vol. 3 at 508-09; AW Init. Br. at 252.

349. These prices are best determined by examining the existing contracts Ameritech Wisconsin currently has with its switch vendors, which govern Ameritech Wisconsin's current and future switching purchases and the prices Ameritech Wisconsin will pay for switching. Tr. Conf. Vol. 3 at 508-09; AW Init. Br. at 252-53.

#### **PROPOSED CONCLUSIONS OF LAW**

350. The Commission finds that Ameritech Wisconsin's ARPSM model is appropriately designed to meld the various prices contained in the two contracts Ameritech has with each of its switch vendors and compute the single, implicit price for switching. While the CLECs dispute some of the inputs of the ARPSM model, the CLECs do not challenge its underlying methodology.

2. What are the appropriate numbers for growth lines versus replacement lines?

**SYNOPSIS OF TESTIMONY**

Mr. Palmer described the appropriate weightings of replacement lines and growth lines. *See* Tr. Conf. Vol. 3 at 508-23 (Palmer Rebuttal); *id.* at 648-51 (Palmer Additional Direct); Tr. Vol. 2 at 698-711 (Palmer Direct). ✓

**PROPOSED FINDINGS OF FACT**

351. The prices contained in the two-tiered contractual structure are based on the assumption that, on a forward-looking basis, **[Begin Conf \*\*\* \*\* End Conf]** of all lines purchased will be replacement lines and **[Begin Conf \*\*\* \*\* End Conf]** will be growth lines. This is the weighting that ARPSM uses to compute the single average price per line of switching. Tr. Conf. Vol. 3 at 648; AW Init. Br. at 254.

***Two-Tiered Contractual Structure***

352. Ameritech has two contracts with each vendor. One deals with the replacement of specific, 1-A analog switches in specific wire centers with new digital switches. The other contract deals with the addition of new lines to existing or newly-placed digital switches. Tr. Vol. 2 at 698-99; AW Init. Br. at 248-49.

353. Under both contracts, Ameritech pays for switching on a per-line basis. The prices differ depending on the kind of switching it is buying. Under the first contract, Ameritech pays a relatively inexpensive “replacement line” (or “cutover line”) price. Under the second contract, Ameritech pays a much higher “growth line” price. Tr. Vol. 2 at 699, 708; Tr. Conf. Vol. 3 at 509; AW Init. Br. at 249.

Ameritech to buy their digital switches. Once Ameritech does so, Ameritech becomes “locked in” to that vendor, and can only add additional growth lines to that switch by going back to that same vendor. Thus, the vendors then charge high growth line prices to recover both the cost of the growth lines *and* any loss taken on the low replacement line prices (plus a reasonable profit). Tr. Vol. 2 at 708-09; Tr. Conf. Vol. 3 at 516-17; AW Init. Br. at 249-51; AW Reply Br. at 188-90.

*ARPSM's Methodology*

356. Despite the two-tiered contractual structure, Ameritech is really only buying one thing – a single line of switching. ARPSM is designed to take the various prices from the various contracts and compute the single average price for a line of switching that a vendor would charge in the absence of the competitive two-tiered contractual structure. Tr. Vol. 2 at 699-700; AW Init. Br. at 251-52; AW Reply Br. at 190.

357. This price is Ameritech Wisconsin’s forward-looking cost for a line of switching. It is the price the vendors would charge for a line of switching if Ameritech Wisconsin went to them today and asked them to replace all of its switches. Tr. Vol. 2 at 708-10; Tr. Conf. Vol. 3 at 509; AW Init. Br. at 251; AW Reply Br. at 190.

358. In computing this price, ARPSM weights each of the two prices according to the respective numbers of replacement lines and growth lines that will be placed under the contracts. Tr. Vol. 2 at 708-11; Tr. Conf. Vol. 3 at 509; AW Init. Br. at 251-52; AW Reply Br. at 190.

359. This ratio is based on the number of each kind of line that will be placed on a



to provide is fixed by contract) and the number of growth lines can be reasonably estimated (based on growth projections). Since the vendors know how many of each kind of line they will have to provide, they can set and calibrate the prices for each type of line accordingly so that the total revenues derived from the growth and replacement lines together recover the total costs of providing the lines. Tr. Conf. Vol. 3 at 509, 516-17, 649-51; Tr. Vol. 2 at 700-01, 707-10; AW Init. Br. at 250-51, 254-55, 257; AW Reply Br. at 189-90.

361. Thus, the replacement line price is tied directly to the growth line price, and more specifically, the number of each kind of line the vendor will be obligated (in the case of replacement lines) and will be able (in the case of growth lines) to provide. Tr. Vol. 2 at 700-01, 707-10; AW Init. Br. at 250-51; AW Reply Br. at 189-90.

362. The ratio should not be based on the number of replacement lines placed in the past under different contracts with different prices. The prices Ameritech paid in the past under previous contracts for replacement lines placed in the past is simply irrelevant to today's forward-looking cost of switching and is inconsistent with forward-looking TELRIC principles. Dr. Ankum's proposal to include millions of replacement lines placed under prior contracts reflects an embedded viewpoint that is inconsistent with forward-looking TELRIC principles. Tr. Conf. Vol. 3 at 510, 513; AW Init. Br. at 255-59; AW Reply Br. at 191-93.

363. The prices in the current contracts are based on the particular set of assumptions described above. Dr. Ankum apparently assumes that the vendors would provide millions of additional lines at the very low prices at which they have agreed to placed only an expressly

raise their prices significantly, and Ameritech would incur those substantial additional costs. The fundamental problem with the CLECs' approach – *i.e.*, using the current contracts and the prices specified therein and at the same time adding millions of replacement lines not covered by those contracts – is that it necessarily causes Ameritech Wisconsin to eat all of those substantial additional costs. Tr. Conf. Vol. 3 at 509-12, 515-18; AW Init. Br. at 258-59; AW Reply Br. at 191-93.

364. ARPSM is not a TELRIC model; rather, it simply computes the forward-looking price for a line of switching. This price is then used as a cost input in the NUCAT model, which, consistent with TELRIC, applies that price to the whole of Ameritech Wisconsin's network to develop the forward-looking cost of replacing the whole network from scratch. Tr. Conf. Vol. 3 at 514-15; AW Init. Br. at 259-60; AW Reply Br. at 193-94.

#### **PROPOSED CONCLUSIONS OF LAW**

365. The Commission concludes that Ameritech Wisconsin appropriately bases the ratio of replacement lines to growth lines on the number of each kind of line that will be placed on a forward-looking basis under the current switch vendor contracts. These line counts, and the per-line prices associated with each kind of line, are based on carefully calibrated assumptions regarding how many of each kind of line the vendors will have to (or be able to) provide, and what prices they must charge in order to recover their costs.

366. The Commission rejects the CLECs' argument that the number of replacement lines should include millions of additional lines (not covered by the current contracts) placed

do such a thing. In fact, this proposal leads to absurd results if taken to its extreme. Under the scorched node approach under TELRIC (as defined by the CLECs), the CLECs' proposal would have one of the vendors provide roughly 8.5 million lines *for free*.

3. What are the appropriate order intervals?

SYNOPSIS OF TESTIMONY

Mr. Palmer explained the Lucent ordering interval. Tr. Conf. Vol. 3 at 643 (Palmer Additional Direct). ✓

PROPOSED FINDINGS OF FACT

367. Ameritech Wisconsin and the CLECs agree that the appropriate ordering interval for Lucent switches is [Begin Conf \*\*\* \*\* \*\*\* End Conf] weeks. Tr. Conf. Vol. 3 at 643; AW Init. Br. at 261; AW Reply Br. at 195.

PROPOSED CONCLUSIONS OF LAW

368. The Commission concludes that Ameritech Wisconsin appropriately uses a [Begin Conf \*\*\* \*\* \*\*\* End Conf] week ordering interval for Lucent switches.

4. What blending of switch types and manufacturers should be used?

SYNOPSIS OF TESTIMONY

Mr. Palmer discussed how Ameritech Wisconsin determined the appropriate blending of switch types and manufacturers. Tr. Vol. 2 at 700-01 (Palmer Direct). ✓

PROPOSED FINDINGS OF FACT

369. **Replacement Lines:** The precise number of replacement lines that will be placed on a forward-looking basis is based on the terms of the switch contracts with each vendor; those contracts identify the specific switches at specific wire centers that will be replaced. Tr. Vol. 2 at

anticipated, and then applying weighting factors to this estimate. Tr. Vol. 2 at 701. Those factors are **[Begin Conf \*\*\* \*\*\*\*\* End Conf]**. ULS Cost Study, Tab 7.0; AW Init. Br. at 261.

#### **PROPOSED CONCLUSIONS OF LAW**

371. The Commission concludes that Ameritech Wisconsin's blending of switch types and manufacturers is appropriate, as it is based on Ameritech Wisconsin's current contracts with its switch vendors.

5. Does the mix of analog and digital lines impact switching costs, and if so, what is the appropriate mix assuming that switching costs are recovered in port charges?

#### **SYNOPSIS OF TESTIMONY**

Mr. Palmer discussed the appropriate blending of digital and analog lines. Tr. Vol. 2 at 700-04 (Palmer Direct); Tr. Conf. Vol. 3 at 539-40 (Palmer Rebuttal). ✓

#### **PROPOSED FINDINGS OF FACT**

372. The prices for replacement and digital lines differ depending on whether those lines are analog lines or digital lines. Thus, the mix of analog and digital replacement lines and analog and digital growth lines impacts the weighted average price per line computed by ARPSM. Tr. Vol. 2 at 700; AW Init. Br. at 262.

373. The appropriate analog/digital mix used in ARPSM for each type of line should be the mix provided in the switch vendor contracts for each type of line because the prices for each type of line are based on certain assumptions about how many of each type of line Ameritech will buy. Tr. Vol. 2 at 700, 703; Tr. Conf. Vol. 3 at 539; AW Init. Br. at 262-63; AW

**End Conf]**. Tr. Conf. Vol. 3 at 539; ARPSM, Tab “Replacement Line Inputs,” Ex. 129C, Tab C, at 23; AW Init. Br. at 262.

375. The appropriate weightings for growth lines across all vendors are: **[Begin Conf \*\*\*\*\* End Conf]** analog and **[Begin Conf \*\*\* \*\*\*\*\* End Conf]** digital. Tr. Vol. 2 at 703; ULS Cost Study, Tab. 7.0; AW Init. Br. at 262-63.

376. Dr. Ankum’s proposed weighting of **[Begin Conf \*\*\*\*\***  
**\*\*\* End Conf]** is based on a hypothetical mix that was not the basis for the contractual prices, and altering the mix upon which those prices were based is improper and would result in different prices being charged by the vendors. Tr. Conf. Vol. 3 at 539-40; AW Init. Br. at 263; AW Reply Br. at 196.

#### **PROPOSED CONCLUSIONS OF LAW**

377. Ameritech Wisconsin’s analog/digital line mixes and weightings in ARPSM are appropriate. They are based on the numbers of each kind of line contemplated under the current switch vendor contracts and the prices actually paid by Ameritech Wisconsin under those contracts.

#### **6. What are the appropriate fill factors?**

#### **SYNOPSIS OF TESTIMONY**

Mr. Palmer and Mr. Mullen explained Ameritech Wisconsin’s switching fill factors. *See* Tr. Vol. 2 at 487-491, 701-07 (Palmer Direct); Tr. Conf. Vol. 3 at 540-41 (Palmer Rebuttal); Tr. Vol. 2 at 1060-65 (Mullen Direct); Ex. 25C.

#### **PROPOSED FINDINGS OF FACT**



379. *Analog Growth Lines*: This fill factor is **[Begin Conf \*\*\* \*\*\* \*\*\* End Conf]**. Tr. Conf. Vol. 3 at 487. Mr. Palmer and Mr. Mullen explained the derivation of this factor and why it is reasonable. Tr. Vol. 2 at 703 (Palmer Direct); *id.* at 1062-63 (Mullen Direct); AW Init. Br. at 263-64.

380. *Digital Lines*: This fill factor is **[Begin Conf \*\*\* \*\*\*\*\* End Conf]**. Tr. Conf. Vol. 3 at 487. This factor is the product of two factors: a “DS-1 administration factor” that accounts for the portion of the 24 DS-0 channels within each DS-1 digital line that are not available for providing service, and a “DS1/DS0 Mux” factor that accounts for the fill factor attributable to the demultiplexing equipment necessary to convert DS-1 signals into DS-0 signals for transmission through the switch fabric. Mr. Palmer and Mr. Mullen explained the derivation of this factor and why it is reasonable. Tr. Vol. 2 at 702-03; *id.* at 1064; AW Init. Br. at 264; AW Reply Br. at 197.

381. *Usage-Based CCS Costs*: This fill factor is **[Begin Conf \*\*\* \*\*\*\*\* End Conf]**. Tr. Conf. Vol. 3 at 491. Since ARPSM computes the fill-adjusted average price per-line and extracts from that price the portion that is usage sensitive and the portion that is non-usage sensitive, the usage-based portion must also be fill adjusted so that the costs of the non-usage sensitive line termination portion of the per-line price are not overstated. Tr. Conf. Vol. 3 at 491. Mr. Palmer described the derivation of this factor at Tr. Vol. 2 at 706-07 and Tr. Vol. 3 Conf. at Tr. 540-41; AW Init. Br. at 265.

382. Dr. Ankum’s suggestion to weight CCS-related prices between replacement CCS

383. For the reasons stated above in resolving Section I.C.(2)(a), the Commission adopts Ameritech Wisconsin's switching fill factors. Unlike the CLECs' proposed fill factors, Ameritech Wisconsin's proposed fills are carefully measured and supported by detailed evidence. Moreover, they represent a realistic measure of the actual usage of the various switching elements. They thus conform to the FCC's mandate that fill factors represent a "reasonable projection of the actual total usage of the element." *First Report and Order*, ¶ 682. In contrast, the CLECs' proposal of a 100% fill factor for both the line side and the trunk side of the switch amounts to no fill factor at all, because no piece of equipment or facility is ever utilized at 100% continuously over the long term.

7. What depreciation lives and salvage factors should be used?

SYNOPSIS OF TESTIMONY

Mr. Palmer discussed the appropriate depreciation lives to use at Tr. Conf. Vol. 3 at 544-45 (Palmer Rebuttal). ✓

PROPOSED FINDINGS OF FACT


384. The depreciation life for digital switches is **[Begin Conf \*\*\*\*\* End Conf]** years. An economic life is a theoretical concept and is an average of the lives of all switches. Because it is an average, some switches will have lives longer than the average, and others will have lives shorter than the average. Tr. Conf. Vol. 3 at 545; Ex. 13C at 1; AW Init. Br. at 265-66; AW Reply Br. at 198-99.

PROPOSED CONCLUSIONS OF LAW

385. Ameritech Wisconsin's switch depreciation life is adopted. It is derived from and

**8. What maintenance factors should be used?**

**SYNOPSIS AND PROPOSED FINDINGS OF FACT**


*See* Section I.C.(2)(b). 

**PROPOSED CONCLUSIONS OF LAW**

386. For the reasons discussed above under Section I.C.(2)(b), Ameritech Wisconsin's maintenance factors are reasonable and are appropriately applied in the ULS cost study.

**9. How should the cost of right-to-use fees be addressed?**

**SYNOPSIS OF TESTIMONY**

Mr. Palmer discussed right-to-use fees at Tr. Vol. 2 at 703-04 (Palmer Direct). 

**PROPOSED FINDINGS OF FACT**

387. The switch vendor contracts specify a right-to-use ("RTU") fee per replacement line for the central office switch software. Tr. Vol. 2 at 703.

388. The RTU fees do not apply to growth lines. Tr. Vol. 2 at 704.

389. Even though vendors assess RTU fees only on replacement lines, those fees must be spread across all lines because ARPSM only calculates a single price per line regardless of vendor and regardless of whether the line is a cutover or growth line; it does not calculate a separate average price for replacement lines and for growth lines. Tr. Vol. 2 at 704; AW Init. Br. at 266; AW Reply Br. at 199.

390. Because vendors do not assess RTU fees on growth lines, the price weighting for growth lines was set at zero. Tr. Vol. 2 at 704.

**PROPOSED CONCLUSIONS OF LAW**



improperly attribute RTU fees to growth lines, and ARPSM therefore does not result in recovery of RTU fees on growth lines.

10. **Should the revenue ready fees be used as inputs in the model and, if so, how?**

**SYNOPSIS OF TESTIMONY**

Mr. Palmer discussed revenue ready fees at Tr. Vol. 2 at 704-05 (Palmer Direct). ✓

**PROPOSED FINDINGS OF FACT**

392. In addition to the per line prices, the switch vendors charge Ameritech revenue ready (“RR”) fees as separate charges designed to compensate the vendors for performing certain traffic engineering and provisioning functions that were previously handled by Ameritech. Tr. Vol. 2 at 704-05; AW Init. Br. at 266; AW Reply Br. at 200.

393. ARPSM accounts for these fees as “adders” to the per-line purchase price. Tr. Vol. 2 at 704-05; AW Init. Br. at 266.

394. Because some of the contracts specify different RR fees for each year, ARPSM levelizes them for recovery over the long term. Tr. Vol. 2 at 705; AW Init. Br. at 266; AW Reply Br. at 200.

**PROPOSED CONCLUSIONS OF LAW**

395. The Commission finds that revenue ready fees are part of Ameritech Wisconsin’s forward-looking switching costs, and thus, Ameritech Wisconsin may recover them. Ameritech Wisconsin appropriately levelizes those fees over the long term because some of the vendor contracts specify different fees in each year.

#### **PROPOSED FINDINGS OF FACT**

396. Ameritech Wisconsin incurs forward-looking costs for making newly-installed switches revenue ready. These costs are not included in the contractual per-line prices. Thus, Ameritech Wisconsin applied “in plant” factors in its ULS cost study to account for and recover these forward-looking costs. These factors are found at Tabs 8.16-8.19 of the ULS cost study; AW Init. Br. at 267-68; AW Reply Br. at 200.

#### **PROPOSED CONCLUSIONS OF LAW**

397. The Commission concludes that Ameritech Wisconsin is entitled to recover its forward-looking costs of making newly-installed switches revenue ready. Its “in plant” factors appropriately recover these costs.

#### **(2) Line Port issues**

##### **(a) Should usage charges apply in addition to a per port charge?**

1. What costs vary with usage?
2. What costs do not vary with usage?

#### **SYNOPSIS OF TESTIMONY**

Mr. Palmer discussed how Ameritech Wisconsin incurs usage-based switching costs. Tr. Vol. 2 at 997-98 (Palmer Cross); Tr. Conf. Vol. 3 at 524-32 (Palmer Rebuttal); *id.* at 653-57 (Palmer Additional Direct).



#### **PROPOSED FINDINGS OF FACT**

398. Usage is a function of the switch that causes costs. End-user customers’ usage incrementally causes switch investments and/or upgrades. Thus, the ULS rate should contain a usage-sensitive, per MOU component to recover the costs of switching caused by switch usage.

costs. It is the job of the cost analyst to take the per line prices provided in the contracts and determine the portion of that price that is usage related. Tr. Conf. Vol. 3 at 524, 532; *id.* at 653-54; AW Init. Br. at 270.

400. The cost of a switch is tied directly to the amount of capacity that that switch can handle. Switching costs increase with increases in usage because as usage increases, the capacity of the switch must be augmented by adding more equipment to the switch to channel calls from the line side to the trunk side of the switch. Tr. Conf. Vol. 3 at 524-27, 532, 655; AW Init. Br. at 271-73; AW Reply Br. at 203-04.

401. Adding this equipment renders the switch more expensive to manufacture. The vendors pass these costs on to Ameritech in the form of higher per-line prices. Tr. Conf. Vol. 3 at 527-28, 532, 655; AW Init. Br. at 271-73; AW Reply Br. at 203-04.

402. And, aside from the per-line prices, the vendor contracts *do* contain provisions dealing with usage-based charges. The vendors assess these charges when Ameritech orders “CCS jobs,” which are periodically necessary to augment the switch and increase its capacity by adding additional equipment in order to accommodate increases in usage on the switch. Tr. Conf. Vol. 3 at 524-25, 531; AW Init. Br. at 274-75.

403. Without a usage-based ULS rate element, a pure flat rate would result in Ameritech Wisconsin subsidizing the CLECs’ high-use customers, who contribute disproportionately more to usage-related switch investments. The CLECs would get locked into a low per port flat rate based on outdated usage assumptions. But when the vendor increased its

404. Ameritech Wisconsin may recover its switching costs via a bifurcated switching rate that contains a flat-rated element for the line port, and a usage-sensitive element to recover the investment costs of the switch matrix. The FCC recognizes that ILECs' forward-looking switching costs include the costs of switch usage, and it mandates that ILECs be able to recover these costs through a combination of a flat-rated charge for line ports and a usage-sensitive rate for the switching matrix. *First Report and Order*, ¶ 810; *In the Matter of Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, Order on Reconsideration*, CC Docket No. 96-98, FCC 96-394 (rel. Sept. 27, 1996), ¶¶ 2, 6. In addition, 49 of the 50 states permit ILECs to establish a bifurcated rate structure.

405. The switch matrix – the equipment inside the switch that channels calls from the line side to the trunk side – is a shared facility. *First Report and Order*, ¶ 810. Users of the switch matrix do not use it equally. As demonstrated by the FCC's May 2001 Local Competition Status Report, the CLECs' principal customers are and will be high-use customers – medium and large businesses. That report shows that over 60% of CLEC customers nationwide – and 69% of CLEC customers in Wisconsin – are medium and large businesses, institutional, and government customers. These customers consume more of the switch's resources and cause disproportionately more investment costs attributable to that usage. They make much greater use of the shared switching equipment and use more of the switch's capacity than does the average Ameritech Wisconsin customer, and they do so primarily at peak times, which are normally business hours. Peak time usage contributes to exhaustion of the shared switching matrix and

Ameritech Wisconsin could not fully recover these costs from the users who play a disproportionately greater role in causing them.

406. Accordingly, we adopt Ameritech Wisconsin's proposed bifurcated rate structure and reject the CLECs' request that Ameritech Wisconsin be limited to a simple flat-rated port charge for ULS. The CLECs' proposal would result in Ameritech Wisconsin and its customers being forced unfairly to subsidize the CLECs and their high usage customers.

- (b) **What are the standard features that should be included in the cost of a basic port and how are the costs for these features to be calculated?**

#### **SYNOPSIS OF TESTIMONY**

Ameritech Wisconsin did not submit testimony on this issue. ✓

#### **PROPOSED FINDINGS OF FACT**

407. In calculating the cost of the basic port, Ameritech Wisconsin included all features resident in a switch, including all vertical features and functionalities. AW Init. Br. at 255.

#### **PROPOSED CONCLUSIONS OF LAW**

408. The Commission concludes that Ameritech Wisconsin's basic port rate appropriately includes the costs of all features resident in a switch, including all vertical features and functionalities.

- (c) **Is it appropriate to load the costs for the following items onto the port and, if so, have the costs been appropriately calculated in Ameritech's model?**

1. **Main distribution frame**

2. **Telephone number**

**7. Billing systems development**

**SYNOPSIS OF TESTIMONY**

Mr. Palmer discussed the items that should be included in the costs of the unbundled port. Tr. Vol. 2 at 707 (Palmer Direct); Tr. Conf. Vol. 3 at 537-38 (Palmer Rebuttal). ✓

**PROPOSED FINDINGS OF FACT**

409. In addition to the line termination, RTU, and RR outputs of ARPSM, the overall TELRIC of the unbundled port should include the costs of the following components: the main distribution frame termination, telephone number, intercept, directory, and other additional expenses related to methods and procedures development, reports processing, and billing systems development. Tr. Vol. 2 at 707; AW Init. Br. at 275-76.

410. The costs for these components have been calculated in Ameritech Wisconsin's ULS cost study. Tr. Conf. Vol. 3 at 537-38.

**PROPOSED CONCLUSIONS OF LAW**

411. The Commission concludes that Ameritech Wisconsin's ULS port rate properly includes the costs of: the main distribution frame termination, telephone number, intercept, directory, and other additional expenses related to methods and procedures development, reports processing, and billing systems development.

- (d) **What are the cost differences between different types of ports and the basic port and how should these costs be calculated?**

**SYNOPSIS OF TESTIMONY**

Ameritech Wisconsin did not submit testimony on this issue. ✓

**PROPOSED FINDINGS OF FACT**

#### **PROPOSED CONCLUSIONS OF LAW**

413. The Commission concludes that Ameritech Wisconsin appropriately calculates the costs of each of the various unbundled local switching ports it offers.

(3) What adjustments need to be made to calculate tandem switching costs?

#### **SYNOPSIS OF TESTIMONY**

Ameritech Wisconsin did not submit testimony on this issue. ✓

#### **PROPOSED FINDINGS OF FACT**

414. No adjustments need to be made to Ameritech Wisconsin's calculation of its tandem switching costs. The CLECs do not challenge the manner in which Ameritech Wisconsin calculated its tandem switching costs nor the resulting MOU rate. AW Init. Br. at 277.

#### **PROPOSED CONCLUSIONS OF LAW**

415. The Commission concludes that Ameritech Wisconsin appropriately calculates the costs of tandem switching, and properly does so on a usage-sensitive, minutes of usage ("MOU") basis.

#### **E. Transport Related Issues**

##### **(1) Trunk Port Issues**

#### **SYNOPSIS OF TESTIMONY**

Mr. Palmer discussed the calculation of Ameritech Wisconsin's trunk port costs. Tr. Vol. 2 at 705-07 (Palmer Direct). ✓

#### **PROPOSED FINDINGS OF FACT**

416. Trunk ports, like line ports, are priced on a per-port basis under the switch vendor

then multiplied by the number of ports needed on a forward-looking basis. Tr. Vol. 2 at 705;  
AW Init. Br. at 277-78.

418. The fill factor for trunk ports is **[Begin Conf \*\*\* \*\*\*\*\* End Conf]**. Tr. Conf.  
Vol. 3 at 490.

#### **PROPOSED CONCLUSIONS OF LAW**

419. The Commission finds that Ameritech Wisconsin appropriately calculates its  
trunk port costs using the ARPSM model.

(a) **What fill factors are appropriate to convert DS1's to DSO's?**

#### **SYNOPSIS OF TESTIMONY**

Mr. Palmer described the factors used to convert DS1s to DS0s. Tr. Vol. 2 at 705  
(Palmer Direct). ✓

#### **PROPOSED FINDINGS OF FACT**

420. Trunk ports are priced on a DS-1 basis. Tr. Vol. 2 at 705.

421. Each DS-1 digital line contains 24 DS-0 channels. Tr. Vol. 2 at 705.

422. To convert the DS-1 price to a DS-0 price, the DS-1 price was divided by the  
actual trunk fill factor and then by 24. Tr. Vol. 2 at 705.

#### **PROPOSED CONCLUSIONS OF LAW**

423. The Commission concludes that Ameritech Wisconsin's methodology  
appropriately converts DS-1 prices into DS-0 prices. The CLECs do not challenge this approach.

(b) **What growth estimates are appropriate?**

#### **SYNOPSIS OF TESTIMONY**



424. The parties agree that the amount of interoffice usage, rather than growth line counts, is the best measure of the number of trunks that will be added on a forward-looking basis. Tr. Conf. Vol. 3 at 642; AW Init. Br. at 278.

**PROPOSED CONCLUSIONS OF LAW**

425. The Commission concludes that Ameritech Wisconsin appropriately estimates trunk port growth based on interoffice usage.

(c) **How should the equipment from different vendors be blended together?**

**SYNOPSIS OF TESTIMONY**

Ameritech Wisconsin submitted no testimony on this issue.

✓

**PROPOSED FINDINGS OF FACT**

426. In calculating its trunk costs, Ameritech Wisconsin blended the switching equipment from the different vendors in the same proportion as it is currently deployed in the network. AW Init. Br. at 279.

**PROPOSED CONCLUSIONS OF LAW**

427. The Commission finds that Ameritech Wisconsin properly blends the switching equipment from the different vendors in the same proportion as it is currently deployed in the network.

(d) **What blend of cutover and growth lines is appropriate for trunks?**

**SYNOPSIS OF TESTIMONY**

Mr. Palmer discussed the appropriate blend of replacement and growth ports to be used in ARPSM. See Tr. Vol. 2 at 705 (Palmer Direct).

✓

weighting given to the price per growth trunk port in ARPSM is determined by the number of growth trunk ports projected by the amount of inter-office usage. AW Init. Br. at 279-80

429. Ameritech Wisconsin buys trunks on a forward-looking basis only when it buys growth lines; replacement switches already come with enough trunk ports to handle the traffic on the switch, and the costs of those trunk ports are included in the replacement per-line prices. Thus, for each vendor, the replacement trunk port price used in ARPSM is **[Begin Conf \*\*\* \*\*\*\*\* End Conf]**. Tr. Vol. 2 at 705. AW Init. Br. at 279-80.

430. Accordingly, to arrive at an appropriate weighted average price for trunk ports, Ameritech Wisconsin (1) takes the number of anticipated growth trunk ports times the blended trunk port growth price and (2) divides this figure by the sum of (a) the number of replacement trunk ports fixed by the replacement contracts and (b) the number of anticipated growth ports. AW Init. Br. at 279-80.

#### **PROPOSED CONCLUSIONS OF LAW**

431. The Commission concludes that Ameritech Wisconsin's blend of growth and replacement trunk ports is appropriate.

- (2) What are the cost components of dedicated transport and how are these costs calculated?**
  - (a) What are the forward-looking technologies and equipment configurations to use?**
  - (b) What costs are incurred for customized routing?**
  - (c) What loadings onto the costs are appropriate to calculate a price?**

432. Aside from Ameritech Wisconsin's application of a joint and common cost loading factor to its dedicated transport costs, Ameritech Wisconsin's dedicated transport rates stand unchallenged by the CLECs. AW Init. Br. at 280.

**PROPOSED CONCLUSIONS OF LAW**

433. The Commission concludes that Ameritech Wisconsin's dedicated transport rates are appropriate and are therefore adopted.

(3) **What are the costs components for shared or common transport and how are these calculated?**

(a) **What, if any costs differ from dedicated transport?**

**SYNOPSIS OF TESTIMONY**

Ameritech Wisconsin did not submit testimony on this issue. ✓

**PROPOSED FINDINGS OF FACT**

434. Shared transport costs are recovered via a usage-sensitive rate. In contrast, dedicated transport is billed on a flat-rate basis. AW Init. Br. at 280.

**PROPOSED CONCLUSIONS OF LAW**

435. The Commission finds that Ameritech Wisconsin appropriately recovers shared transport costs via a usage-sensitive rate and dedicated transport costs via a flat-rated charge.

(b) **What loadings onto the costs are appropriate to calculate a price?**

**SYNOPSIS OF TESTIMONY**

Ameritech Wisconsin did not submit testimony on this issue. ✓

**PROPOSED FINDINGS OF FACT**

436. The joint and common cost loading factor discussed in Section I.B.(2) above is

(c) **How should the cost of shared transport be recovered?**

**SYNOPSIS OF TESTIMONY**

Mr. Palmer discussed the recovery of Ameritech Wisconsin's shared transport costs at Tr. Vol. 2 at 885-91 (Palmer Supplemental Surrebuttal); Tr. Conf. Vol. 3 at 627-29 (Palmer Surrebuttal). ✓

**PROPOSED FINDINGS OF FACT**

438. In developing its blended transport costs, Ameritech Wisconsin calculated the average distance traveled by calls in each of the four routing scenarios: (1) Ameritech to Ameritech tandem-routed call; (2) Ameritech to Ameritech direct call; (3) Ameritech to non-Ameritech tandem-routed call; (4) Ameritech to non-Ameritech direct call. Tr. Vol. 2 at 887; AW Init. Br. at 281.

439. Ameritech Wisconsin then calculated a single weighted average distance traveled per call, based on the relative number of calls traveling each of the four routes. Tr. Vol. 2 at 887.

440. Mr. Palmer further explained:

- (1) that this methodology is reasonable;
- (2) that end office to tandem facilities used exclusively for access calls are not included in the average distance calculation;
- (3) that the study properly included those very few local calls that travel in excess of 100 miles (less than 3% of all local calls) because those calls travel over a tandem;
- (4) that the average end office to tandem distance and the number of calls traveling over 100 miles across a tandem have almost no impact on the cost of blended transport, and any impact that they do have gets lost in the rounding of the study and therefore does not affect the resulting rate. Tr. Vol. 2 at 887-88; Tr. Vol. 3 at 628; AW Init. Br. at 281-83.

admitted that he has not yet made similar corrections to his calculations in this proceeding, calculations using the same flawed methodology. AW Reply Br. at 206-07.

#### **PROPOSED CONCLUSIONS OF LAW**

442. The Commission finds that Ameritech Wisconsin appropriately calculates the costs of shared transport and appropriately recovers those costs via a usage-sensitive rate. Moreover, the rate proposed by the CLECs substantially understates Ameritech Wisconsin's shared transport costs.

(4) **Based on the terms of the dark fiber offering as agreed to in the stipulation in the OSS case (6720-TI-160), what are the cost components for dark fiber, how are these costs calculated and what is the appropriate price?**

(a) **What costs factors differ from dedicated transport?**

#### **SYNOPSIS OF TESTIMONY**

Mr. Palmer described the methodology and reasonableness of Ameritech Wisconsin's dark fiber cost study at Tr. Vol. 2 at 697 (Palmer Direct). ✓

#### **PROPOSED FINDINGS OF FACT**

443. Because dark fiber is not connected to the electronics that "light" it and render it capable of carrying communications services, the cost of dark fiber differs primarily from that of dedicated transport in that the cost of dark fiber includes the cost of the electronics necessary to "light" the fiber. AW Init. Br. at 284.

#### **PROPOSED CONCLUSIONS OF LAW**

444. The Commission finds that Ameritech Wisconsin's dark fiber cost study properly calculates the costs of dark fiber and properly recovers the costs of the electronics used to "light"

#### **PROPOSED FINDINGS OF FACT**

445. While this issue was not litigated in this proceeding, if the Commission wishes to address it here, it should simply reaffirm the relevant findings and conclusions from its arbitration award in last year's AT&T arbitration. AW Init. Br. at 284.

#### **PROPOSED CONCLUSIONS OF LAW**

446. The Commission reaffirms the relevant findings and conclusions from its arbitration award in Docket No. 05-MA-120 regarding the criteria that govern when Ameritech Wisconsin must offer dark fiber.

(c) What loadings onto the costs are appropriate to calculate a price?

(d) How should the rates be determined?

#### **SYNOPSIS OF TESTIMONY**

Ameritech Wisconsin did not submit testimony on this issue.

#### **PROPOSED FINDINGS OF FACT**

447. The joint and common cost loading factor discussed in Section I.B.(2) above is reasonable. The dark fiber rates should be determined in accordance with the methodology applied in the cost study, with application of the joint and common cost markup. AW Init. Br. at 284-85.

#### **PROPOSED CONCLUSIONS OF LAW**

448. The Commission concludes that the methodology used by Ameritech Wisconsin to calculate its dark fiber costs is reasonable. In addition, Ameritech Wisconsin's joint and common loading factor is appropriate, and Ameritech Wisconsin properly applies that factor to

William Palmer testified regarding the proposed reciprocal compensation rates. *See* Tr. Vol. 2 at 741-42 (Palmer Supplemental Direct); Tr. Vol. 2 at 878-85 (Palmer Surrebuttal); Tr. Conf. Vol. 3 at 657-58 (Additional Redirect). ✓

#### **PROPOSED FINDINGS OF FACT**

449. On November 8, 2000, the Commission issued an order in Docket No. 05-TI-283, which requires the rate structure for reciprocal compensation to include separate setup and duration rate elements. Tr. Vol. 2 at 741; AW Init. Br. at 285.

450. Both Ameritech Wisconsin and the CLEC Coalition agree that recovery for reciprocal compensation costs should be consistent with the Commission's order in Docket No. 6720-TI-160. AW Init. Br. at 285; AW Reply Br. at 213-14.

451. Ameritech Wisconsin has proposed separate setup and duration rate elements in its reciprocal compensation study. Tr. Vol. 2 at 741; AW Init. Br. at 285.

452. The CLEC Coalition does not challenge the duration rate contained in the Ameritech Wisconsin reciprocal compensation study. AW Reply Br. at 213. Nor do they contest most elements of the setup charges proposed by Ameritech Wisconsin, such as measurement, billing, and SS7. Tr. Vol. 2 at 879; AW Reply Br. at 213.

453. Ameritech Wisconsin includes non-conversation time ("NCT") in its proposed setup charges. Tr. Vol. 2 at 880; AW Init. Br. at 285; AW Reply Br. at 213.

454. Non-conversation time occurs each time a call is attempted, whether the call is completed or not. It is not in any way dependent on the call's duration. It does entail a cost, however; switch equipment is used and connections are established. To arrive at the amount,

Init. Br. at 286; AW Reply Br. at 213. Accordingly, NCT costs cannot, consistent with the Commission's order in Docket No. 05-TI-283, be recovered in the duration rate. This means that if NCT costs are to be recovered at all, they must be recovered in the call set up rate.

456. Ameritech Wisconsin proposes a duration rate that is significantly lower than the set up rate and is completely usage-sensitive; it only recovers the cost to maintain the circuit and transmit the content of the call, as required by the Commission's order in Docket No. 05-TI-283. *See* Tr. Vol. 2 at 879; AW Init. Br. at 286.

#### **PROPOSED CONCLUSIONS OF LAW**

457. The Commission adopts the reciprocal compensation rates proposed by Ameritech Wisconsin in Exhibit 23C.

458. The separate setup and duration rates proposed by Ameritech Wisconsin are consistent with this Commission's Order in Docket No. 05-TI-283. AW Init. Br. at 285-86.

459. The Ameritech Wisconsin setup rate appropriately includes non-conversation time. There is no dispute that these costs exist. Under our Order, Ameritech Wisconsin can only recover these legitimate costs in its setup rate. *Id.* AW Reply Br. at 213.

- (1) **Should switching costs be recovered in a different manner for unbundled switching than for the switching portion of reciprocal compensation?**

#### **SYNOPSIS OF TESTIMONY**

*See supra* at Section I.F.

#### **PROPOSED FINDINGS OF FACT**

460. *See supra* at Section I.F.



**SYNOPSIS OF TESTIMONY**

*See supra* at Section I.F.

**PROPOSED FINDINGS OF FACT**

462. *See supra* at Section I.F.

**PROPOSED CONCLUSIONS OF LAW**

463. The Commission adopts the set up costs set forth in Exhibit 23C for the reasons discussed above.

(3) **What are the appropriate duration costs?**

**SYNOPSIS OF TESTIMONY**

*See supra* at Section I.F.

**PROPOSED FINDINGS OF FACT**

464. *See supra* at Section I.F.

**PROPOSED CONCLUSIONS OF LAW**

465. The Commission adopts the duration costs set forth in Exhibit 23C for the reasons discussed above. The Commission notes that neither the CLEC Coalition nor Staff objected to the duration costs proposed by Ameritech Wisconsin in Exhibit 23C.

(4) **What loadings onto the setup and duration costs are appropriate to determine prices?**

**SYNOPSIS OF TESTIMONY**

*See supra* at Section I.F.

**PROPOSED FINDINGS OF FACT**

466. *See supra* at Section I.F.

- (1) Whose nonrecurring cost model should be used, Ameritech's model or the CLEC's model (NRCM)? Include supporting reasons based on identified strengths and weaknesses of the two models.



#### SYNOPSIS OF TESTIMONY

William Palmer explained the methodology used to calculate Ameritech Wisconsin's nonrecurring costs. Tr. Vol. 2 at 721-30 (Palmer Direct). Richard Florence responded to the CLECs' alleged criticisms of Ameritech Wisconsin's model, and testified regarding the shortcomings of the CLEC NRCM. Tr. Vol. 6 at 1569-1619 (Florence Rebuttal); *id.* at 1663-70 (Florence Additional Direct). Craig Conwell also testified about the inadequacies of the CLEC NRCM. Tr. Vol. 4 at 1345-58 (Conwell Rebuttal).

#### PROPOSED FINDINGS OF FACT

468. Nonrecurring costs are one-time expenses associated with the work functions and activities performed in conjunction with the initiation and provisioning of telecommunications services and unbundled network elements. Tr. Vol. 2 at 721-22; AW Init. Br. at 287. A nonrecurring cost model focuses on three items: the *tasks* involved, the *activity times* needed to perform the tasks included, and the *probability* that a task will be required. *Id.*; Tr. Vol. 6 at 1714.

##### *Forward-Looking Activity Times*

469. In its non-recurring cost studies, Ameritech Wisconsin identified the costs of different functions needed to provide UNEs by utilizing time and motion studies and relying on the experiences of subject matter experts. *See* Tr. Vol. 2 at 722. AW Init. Br. at 290. For each time and motion study, Ameritech Wisconsin identified the process owners and work groups, collected existing documentation related to process flows, directly observed work where possible, interviewed subject matter experts, developed process mapping flowcharts and

Wisconsin validated the times used in its model. *See* Tr. Vol. 6 at 1592; AW Init. Br. at 290; AW Reply Br. at 214-15.

470. Ameritech Wisconsin has studied each work function. Ex. 129C, Tab A; Ex. 133C, Tab B (extensive documentation detailing the determination of activity times, interview summaries and observation data). Ameritech Wisconsin also performed hundreds of random, direct observations of these activities. Ex. 132, Tabs A & B (Ameritech Wisconsin conducted 225 observations of AIIS Service Center work group and 121 observations of Network Element Control Center work group). Further, Ameritech Wisconsin has made specific adjustments to its probability percentages to reflect forward-looking practices. *See* Tr. Vol. 10 at 3795, 3797; Ex. 133C, Tab B (identifying numerous forward-looking adjustments to probability percentages); AW Init. Br. at 292; AW Reply Br. at 217.

471. The CLEC NRCM model proposed by the CLECs uses activity times that were arrived at “based on the consensus of the NRCM panel of experts” through “round table discussions.” Tr. Vol. 10 at 3653; Ex. 130 (Response to Request No. 8 of Second Set of Requests); AW Init. Br. at 292. The NRCM developers did not document the individual time estimates proposed by their members when estimates were offered. AW Init. Br. at 292. Nor did the NRCM modelers conduct any time or motion studies. *See* Tr. Vol. 10 at 3890; AW Init. Br. at 292; AW Reply Br. at 217.

472. AT&T, one of the proponents of the CCM, previously performed similar time studies – its so called “TOC” studies. A comparison of the TOC study results and the proposed

based on a long run incremental cost (LRIC) analysis. Tr. Vol. 10 at 3896. LRIC is similar to TELRIC for purposes of determining non-recurring costs. Tr. Conf. Vol. 6 at 1714-15; AW Reply Br. at 218-19. The record does not indicate why the CLECs did not use the TOC studies for the NRCM. *Id.*

***Forward-Looking Flow-Through Assumptions***

473. Fallout is the percentage of service orders that require manual intervention to correct and allow the order to be electronically processed. Tr. Vol. 6 at 1575. Flow-through, on the other hand, is the percentage of service orders that are completed without manual intervention. Tr. Vol. 6 at 1575. By definition, the flow-through rate plus the fallout rate equal 100%. AW Init. Br. at 295-96.

474. Fallout only applies to mechanized processes. If a process is designed to be totally manual, the fallout rate would be 100%. However, some manual processes are necessary on a forward-looking basis to provide service in the most economical way possible. Ameritech Wisconsin considered numerous factors when deciding whether to use mechanized or manual processes including, but not limited to, number of customers, number of orders, forecasts, ease of mechanization, and degree of customization required on a regular basis. *See* Tr. Vol. 6 at 1582. For instance, to account for the complexities of making various network elements available for CLECs, Ameritech Wisconsin has many different OSS systems working together on a forward-looking basis. Ex. 87, p. 21; AW Init. Br. at 296; AW Reply Br. at 220.

475. Ameritech Wisconsin has proposed forward-looking order fallout rates that vary

efficiencies to be realized by Ameritech Wisconsin. AW Init. Br. at 296. Ameritech Wisconsin has provided extensive documentation that demonstrates the numerous activities and systems necessary to provision each UNE. Ex. 133C, Tab C; AW Reply Br. at 220-21.

476. The CLEC NRCM applies an across-the-board two percent fallout rate, regardless of the type or number of systems involved. *See* Tr. Vol. 10 at 3655; AW Init. Br. at 297. The record contains no evidence that Ameritech Wisconsin would actually experience a 2% fallout rate at any point in the future. *Id.* at 298; AW Reply Br. at 221.

477. The NRCM bases its fallout percentage on a *resale* service order fallout rate for a *single* system. *See* Tr. Vol. 6 at 1576. Specifically, the developers of the NRCM rely on Southwestern Bell Telephone Company's ("SWBT") Easy Access Sales Environment (EASE) system. *See* Tr. Vol. 10 at 3656; AW Reply Br. at 221-22.

478. The EASE system is not used for ordering UNEs. The EASE system is not now designed nor is planned to be able to process a UNE order. *See* Tr. Vol. 6 at 1576. Nor does the flow-through rate associated with the EASE system "refer to or include provisioning or billing activities." Tr. Vol. 6 at 1665. AW Init. Br. at 298; AW Reply Br. at 221.

479. The SWBT EASE system usually handles simple migrations between carriers for customers of a limited size and the use of the EASE system for business customers is limited to those customers having 30 lines or less. Tr. Vol. 6 at 1577. For complex business customers with more than 30 lines, it is not economically efficient to build in all of the modifications that would be required. *See id.*; AW Init. Br. at 298; AW Reply Br. at 221.

481. The AT&T TOC studies showed fallout that ranged from **[Begin Conf \*\*\*\*\*End Conf]**, depending on the work group involved. *See* Tr. Conf. Vol. 7 at 1849. AW Init. Br. at 299; AW Reply Br. at 222-23. These are substantially higher than what is used in the NRCM.

*Efficient, Forward-Looking OSS*

482. Ameritech Wisconsin's model defines "forward looking" as "the expected system or process enhancements Ameritech Wisconsin would be able to put in place over the foreseeable future." Tr. Vol. 6 at 1574; AW Init. Br. at 300.

483. Ameritech Wisconsin's analysis of computer costs identified the OSSs performing functions necessary for UNE service order processing and provisioning. It identified the current resource costs of these systems, and then attributed to service order processing and provisioning a portion of these costs based on capacity consumption. The total costs for service order processing and provisioning were then expressed as unit costs based on total demand. Tr. Vol. 4 at 1352; AW Init. Br. at 301-02.

484. Computer expenses for OSS are directly attributable to, or reasonably identifiable as incremental to, service order and provisioning functions for unbundled network elements. CLECs use these resources of Ameritech Wisconsin in service order processing and provisioning. *See* Tr. Vol. 4 at 1351. But for the incremental provisioning of UNEs, these one-time expenses would not be incurred. Ameritech Wisconsin's nonrecurring cost studies recover these expenses. *Id.* at 1351-52; AW Init. Br. at 302.

will be manual intervention. *See id.* On the other hand, the NRCM sets the copper loop percentage to be 40% and the IDLC percentage to be 60%. *See* Tr. Vol. 10 at 3659; AW Init. Br. at 303; AW Reply Br. at 225-26, 227-28.

486. ***Service Center-Related Costs.*** Ameritech Wisconsin assumed an electronic interface with up-front edits and automatic rejection in its UNE cost study. *See* Tr. Vol. 6 at 1605. The front end interface does not have the detailed information that resides in downstream databases to determine if there are mismatches other than certain obvious errors, such as spelling mistakes. *Id.* Also, it lacks the connectivity to receive rejected orders back from downstream OSSs. *Id.* Thus, service representatives will still be necessary, even in a forward-looking environment. The NRCM does not include recovery for service representatives. *See id.* at 1604; AW Init. Br. at 302; AW Reply Br. at 226.

487. ***Computer Service Order Processing Costs.*** Ameritech Wisconsin incurs computer service order processing costs “when a service order is generated and processed through various network operating support systems in order to provision a request for service.” Tr. Vol. 6 at 1607. These costs are volume sensitive, direct costs associated with ordering the service/UNE being requested. *Id.* The NRCM excludes all computer service order processing costs. *Id.*; AW Init. Br. at 304; AW Reply Br. at 226.

488. ***DIP/DOP Assumptions.*** The CLEC NRCM assumes 100% Dedicated Inside Plant (“DIP”) and 100% Dedicated Outside Plant (“DOP”) for Ameritech Wisconsin’s network. This assumption requires “that all facilities necessary to provision a service are in place and

at 1608. Additionally, it assumes that “there is another termination on the MDF that connects to and includes appropriate line equipment on an end-office switch.” *Id.* In other words, it assumes that in 100% of the cases, no physical assistance is needed by a field or central office technician. Tr. Vol. 2 at 292. In addition “an assumption of 100 percent DIP and 100 percent DOP require[s] an accurate forecast of future demands.” Tr. Vol. 10 at 3906. *See also* AW Init. Br. at 304-05; AW Reply Br. at 227, 229-30.

489. ***Travel Times.*** The CLEC NRCM assumes a nationwide average travel time of 20 minutes between unmanned central offices. Ex. 87, pp. 17-19. The CLECs’ NRCM also utilizes a national default of 20% for the percentage of unmanned central offices. Ameritech Wisconsin utilizes travel time assumptions based on input from subject matter experts and a Wisconsin – specific figure for percentage of unmanned central offices. Ex. 116C, Tabs 62 & 67; AW Init. Br. at 305-06; AW Reply Br. at 223-24.

490. ***Number of Jobs Per Visit.*** The CLEC model assumes that on each trip that a technician makes to a central office, the technician will perform an average of 4 jobs. Ex. 87, p. 19. The Ameritech Wisconsin model assumes completion of one task per trip. AW Init. Br. at 306-07; AW Reply Br. at 224-25.

#### **PROPOSED CONCLUSIONS OF LAW**

491. The parties in this docket agree on the basic methodology underlying a nonrecurring cost model (*compare* CLEC Br. at I.G.-10 with AW Init. Br. at 287), but there is significant disagreement regarding the actual inputs that should be used. Of the two competing



492. Consistent with the 1996 Act and the FCC's TELRIC cost methodology,

Ameritech Wisconsin's model:

- Utilizes times identified from various studies, including time and motion studies, of the activities actually being performed by Ameritech Wisconsin in the field. Ameritech Wisconsin's activity times are consistent, employ forward-looking efficiencies and are in line with those used by AT&T in the "TOC" studies it developed (but which were not used by AT&T and the CLECs here).
- Uses flow-through assumptions for ordering and provisioning UNEs based on Ameritech Wisconsin's actual network and experience, achieving results consistent with those found in other states. The flow-through assumptions used by Ameritech Wisconsin are also consistent with those identified by AT&T for its own network in its TOC studies.
- Defines forward-looking, efficient Operations Support Systems ("OSS") to be the expected system or process enhancements Ameritech Wisconsin would be able to put in place over the foreseeable future and appropriately determines costs on that basis.

AW Init. Br. at 287-88; AW Reply Br. at 215-16.

493. Ameritech Wisconsin's nonrecurring cost model is consistent with the 1996 Act's

pricing requirements as set out by the Eighth Circuit:

[A] forward-looking cost calculation methodology that is based on the incremental costs that *an ILEC actually incurs or will incur* in providing the interconnection to its network or the unbundled access to its specific network elements requested by a competitor will produce rates that comply with the statutory requirement of § 252(d)(1) that an ILEC recover its "cost" of providing the shared items.

*IUB III*, 219 F.3d at 752-53 (emphasis added); AW Init. Br. at 301.

494. In short, Ameritech Wisconsin's model uses appropriate inputs. Ameritech

Wisconsin's model for nonrecurring costs therefore is adopted by the Commission. *Id.* at 288.

NRCM, this Commission would need to drastically change the NRCM's OSS assumptions, flow-through assumptions, and activity times. AW Init. Br. at 288.

496. The assumptions in the NRCM “deviate significantly from what SBC companies and Ameritech Wisconsin will *actually* experience in the foreseeable future” (Tr. Vol. 4 at 1345), and therefore cannot serve as the basis for a non-recurring cost model.

It is clear from the language of the statute that Congress intended the rates to be “based on the cost ... of *providing the interconnection or network element*,” *id.* (emphasis added), not on the cost some imaginary carrier would incur by providing the newest, most efficient, and least cost substitute for the actual item or element which will be furnished by the existing ILEC pursuant to Congress's mandate for sharing. Congress was dealing with reality, not fantasizing about what might be.

*IUB III* at 750; AW Init. Br. 300-01. The CLECs improperly try to minimize the Eighth Circuit's precedents. AW Reply Br. at 225.

497. The Commission also agrees with Ameritech Wisconsin that the Task Oriented Cost (“TOC”) studies conducted by AT&T – one of the principal advocates of the NRCM – confirm the reasonableness of Ameritech Wisconsin's model inputs. AW Init. Br. at 288-89. The studies identified activity times and fallout rates consistent with those produced by the Ameritech Wisconsin model, and were conducted by some of the same people now sponsoring the CLEC NRCM. AT&T's own TOC studies were prepared based on long-run incremental cost (LRIC) principles (*see* Tr. Vol. 10 at 3896), which are no different than TELRIC pricing principles when determining nonrecurring costs. Tr. Conf. Vol. 6 at 1714-15; AW Init. Br. at 288-89.

✓  
*See* Section I.G.(1).

**PROPOSED FINDINGS OF FACT**

498. *See* Section I.G.(1).

**PROPOSED CONCLUSIONS OF LAW**

499. The Ameritech Wisconsin model accurately describes nonrecurring costs as mandated by the 1996 Act for the reasons stated above. Having taken into account all necessary inputs in the appropriate manner, the Commission does not need to make any adjustments to this model. AW Init. Br. at 312-13.

**(b) If the CLEC model is selected:**

1. What inputs should be adjusted and why?
2. Are there any other adjustments that should be made to nonrecurring costs?

**SYNOPSIS OF TESTIMONY**

The shortcomings of the CLEC NRCM and the adjustments necessary to remedy them are outlined in Richard Florence's Rebuttal Testimony. *See* Tr. Vol. 6 at 1569-1619. ✓

[Ameritech Wisconsin believes that its model accurately calculates nonrecurring costs and properly applies the 1996 Act's pricing requirements and should be adopted. In the alternative, if the Commission decides to adopt the NRCM, the following findings of fact and conclusions of law would be appropriate:]

**PROPOSED FINDINGS OF FACT**

500. *See supra* at I.G.(1).

**PROPOSED CONCLUSIONS OF LAW**

501. The major inputs of the NRCM have to be adjusted to mirror Ameritech's inputs in order to make the model workable. The NRCM needs to be rerun using the process steps,

502. Moreover, even if the Commission were to alter these major inputs, using the NRCM still would not successfully calculate nonrecurring costs. In addition to the three fundamental deficiencies, there are several additional errors in the CLEC NRCM model that would need to be corrected before it would become acceptable under the requirements of the 1996 Act. *See generally* AW Init. Br. at 314-15.

503. ***Non-recovery of OSS Computer Expenses.*** The CLEC Coalition tries to prevent Ameritech Wisconsin from recovering these costs in any manner whatsoever. The costs are properly recoverable on a non-recurring basis and should be included in the NRCM.

504. ***Assumes Non-Existent Loop Technologies.*** The CLEC Coalition ignores the fact that Ameritech Wisconsin cannot unbundle loops terminated on any type of IDLC system. We agree that the least cost method of unbundling integrated digital loops is by converting the integrated loops to universal DLC or copper feeder loops providing a MDF appearance, which always requires manual intervention. The NRCM should be rerun assuming 100% copper rather than 60% IDLC/40% copper.

505. ***Ignores Continuing Need for Service Center Related Costs.*** The NRCM ignores the continuing need for service representatives for UNEs, even in a forward-looking environment. These costs should be included in the NRCM.

506. ***Discontinues Up-front Recovery of Disconnect Costs.*** Disconnection costs are addressed in more detail later in Section I.G.(2). The NRCM should permit recovery of disconnect costs as part of up-front installation costs.

508. ***Unrealistic DIP/DOP Assumptions.*** The NRCM should be rerun assuming 45% DIP and 50% DOP. Tr. Vol. 1 at 293.

509. ***UNE-P.*** As discussed more fully under Section I.G.(5), Ameritech Wisconsin's UNE-P offering represents the "existing combination" of an unbundled loop and an ULS port, as required under federal law.

510. ***Travel times.*** The CLECs' one-size-fits-all, nationwide default travel time of 20 minutes is arbitrary and would cause Ameritech Wisconsin to underrecover its costs. The CLEC NRCM ought to be rerun substituting Ameritech Wisconsin's travel times: 30 minutes to a customer/end-user's premises and 60 minutes to an Ameritech Wisconsin central office.

511. ***Jobs Per Visit.*** The CLECs arbitrarily claim that an Ameritech Wisconsin service technician will perform 3 other jobs each time he/she goes to a certain central office or other network facility. The NRCM should be adjusted to reflect one job per technician visit.

(2) **Should disconnection costs be included in upfront installation costs?** ✓

#### **SYNOPSIS OF TESTIMONY**

Richard Florence explains why Ameritech Wisconsin proposes to recover its disconnect costs on an up-front basis. Tr. Vol. 6 at 1605-06 (Florence Rebuttal).

#### **PROPOSED FINDINGS OF FACT**

512. Ameritech Wisconsin has historically combined the costs for both installation and the present value of the disconnection costs. Tr. Vol. 6 at 1606. Ameritech Wisconsin includes disconnection costs in its up-front installation costs for retail end-users. Moreover, setting service order and service connection charges to recover the new connection and eventual

513. We agree with Ameritech Wisconsin that disconnection costs should continue to be included in up-front installation costs. This is consistent with existing practices. Moreover, Ameritech Wisconsin should not be saddled with the risk of not recovering its disconnection costs from financially-stressed CLECs. AW Init. Br. at 316; AW Reply Br. at 229-30.

514. Further, as discussed above in Sections I.G.(1) and (1)(b), the CLECs' reliance on 100% DIP/DOP to support no recovery of disconnect costs is unwarranted. Ameritech Wisconsin has in the past and will in the future incur costs to disconnect customers. AW Init. Br. at 316; AW Reply Br. at 229-30.

- (a) If so, what expected life should be used in determining the frequency of disconnection costs?

#### SYNOPSIS OF TESTIMONY

Mr. Florence addressed the expected life on cross examination. Tr. Vol. 6 at 1706 (Florence Cross). ✓

#### PROPOSED FINDINGS OF FACT

515. Ameritech Wisconsin's nonrecurring cost model uses **[Begin Conf \*\*\*\*\*  
\*\*\*\*\*End Conf]** as an average location life. See Tr. Vol. 6 at 1706; AW Init. Br. at 317.

516. The CLECs did not address this issue in their brief. AW Reply Br. at 230.

#### PROPOSED CONCLUSIONS OF LAW

517. The average location life used in Ameritech Wisconsin's cost studies is reasonable and therefore adopted by the Commission.

- (3) What overhead loading rate should be used in determining nonrecurring costs?

518. Ameritech Wisconsin's proposed overhead loading rate is consistent with other benchmarks, including factors approved in other states and comparisons to a desired CLEC benchmark, AT&T. The CLECs have not objected to this process in the shared and common cost portion of the proceeding. AW Init. Br. at 317.

519. The NRCM utilizes an available overhead factor of 10.4%. This is lower than the joint and common cost loading rate advocated by the CLECs for the rest of the studies at issue here. AW Reply Br. at 230-31.

#### **PROPOSED CONCLUSIONS OF LAW**

520. Ameritech Wisconsin has developed the most accurate overhead loading rate and it is consistent with the 1996 Act. Accordingly, the Commission will apply Ameritech Wisconsin's shared and common cost loading factor to the nonrecurring rates established by this proceeding to comply with the FCC's TELRIC pricing rules. AW Init. Br. at 317.

521. We reject the NRCM's rate of 10.4%, noting that it is inconsistent with what the CLECs are advocating for the rest of Ameritech Wisconsin's studies. AW Reply Br. at 230-31.

(4) **Are there costs associated with combining network elements?**

#### **SYNOPSIS OF TESTIMONY**

Ameritech Wisconsin did not submit testimony on this issue.

#### **PROPOSED FINDINGS OF FACT**

522. Ameritech Wisconsin takes the position that this question is outside the scope of identified issues for this proceeding, and, in any event, cannot be answered from the evidence presented in the record. AW Init. Br. at 317; AW Reply Br. at 231.

### PROPOSED CONCLUSIONS OF LAW

524. We agree with Ameritech Wisconsin that this question is outside the scope of identified issues for this proceeding and, in any event, cannot be answered from the evidence presented in the record. Based on the Eighth Circuit's opinion in *IUB I*, 120 F.3d at 813, Ameritech Wisconsin has no affirmative obligation to combine network elements. The Eighth Circuit reaffirmed this position that the requesting carriers, not the ILECs, have the obligation of combining unbundled network elements. *See IUB III*, 219 F.3d at 758-59. The Supreme Court granted certiorari on January 21, 2001, to consider this issue. *Verizon Communications, Inc. v. FCC*, 121 S.Ct. 877 (Jan. 21, 2001); *see also* AW Init. Br. at 318-19.

525. Relatively soon, the Supreme Court will rule directly on this issue and all parties shall know whether there is an affirmative obligation under the 1996 Act to combine network elements. While there may be disagreement between the CLECs and Ameritech Wisconsin on that issue, this docket is not the forum to resolve that dispute. *Id.* at 319-20.

(a) If so, how should those costs be determined?

526. For the reasons stated above, we need not answer this question at this time.

(b) If so, how should those costs be recovered by Ameritech?

527. For the reasons stated above, we need not answer this question at this time.

(5) What are the costs associated with providing an "existing combination?"

### SYNOPSIS OF TESTIMONY

Richard Florence addresses the costs associated with providing an "existing combination" in his rebuttal testimony. Tr. Vol. 6 at 1609-1619; *see also id.* at 1683-90.





the costs of providing this “existing combination.” *See* Ex. 41; AW Init. Br. at 320; AW Reply Br. at 232.

529. For simple migrations, converting a basic plain old telephone service (POTS) line having dial tone, the only connection activities that may occur are minor translation changes. *See* Tr. Vol. 6 at 1612. To process this migration today, two service orders are processed by Ameritech, one for the ULS port and one for the unbundled loop. *Id.* at 1613; *see also* AW Init. Br. at 320.

530. Separate service orders will be necessary for the foreseeable future in order to provide the specific loop and port information that will be required to manage UNE-Ps and provide the CLECs with the service level they demand. *See id.* Service changes, PIC changes, service additions, removals, billing and repair requests must come from the CLEC in this situation. Tr. Vol. 6 at 1684. This requires the addition of CLEC account information and billing information, not only to the billing system but to various downstream provisioning databases and systems such as LFACS, SWITCH, LMOS and TIRKS. *Id.* at 1685; AW Init. Br. at 320-21.

531. Where there is no dial tone, other work groups involved with connections for unbundled loops and unbundled ports would have a high probability of performing specific activities in this instance. *See* Tr. Vol. 6 at 1614, 1703, 1713. For example, an Ameritech Wisconsin Field Operations Group (“FOG”) technician may need to confirm the existence of an installed jumper. *See id.* at 1615. The only way to confirm this is with a physical inspection of

reviewing fields according to the local service ordering requirements, validating data as applicable for the required fields, inputting data for the applicable orders, and manually sending confirmation back to the requesting CLEC. Tr. Vol. 6 at 1617-18; AW Init. Br. at 321; AW Reply Br. at 232.

#### **PROPOSED CONCLUSIONS OF LAW**

533. The CLEC NRCM significantly underestimates UNE-P migration costs. For example, migrating UNE-P to the CLEC is much more complicated than simply processing an electronic record change order. Updates to network systems are necessary so other support systems will function properly. *See id.* at 1616-17; AW Init. Br. at 321.

534. Ameritech Wisconsin's proposed price represents ordering and network realities encountered with these orders, rather than the hypothetical DIP/DOP assumptions of the NRCM. Ameritech Wisconsin's proposed price is therefore accepted by the Commission. *Id.* at 321-22; AW Reply Br. at 232.

- (6) What are the costs associated with providing an "ordinarily combined" collection of UNEs?

#### **SYNOPSIS OF TESTIMONY**

*See* Section I.H.(4) above.

#### **PROPOSED FINDINGS OF FACT**

535. *See* Section I.H.(4) above. ✓

#### **PROPOSED CONCLUSIONS OF LAW**

536. Again, in reliance on the Eighth Circuit's decisions in *IUB I* and *III*, neither party

question. One way or the other, this question shall be affirmatively decided relatively soon. The Commission takes no action at this time. AW Init. Br. at 322; AW Reply Br. at 233.

**H. Collocation Related Issues**

**(1) What types of collocation arrangements should be required?**

**SYNOPSIS OF TESTIMONY**

Roy Debetaz addresses the forms of collocation required by the FCC. Tr. Vol. 4 at 1231-35, 1247-49 (Debetaz Rebuttal). ✓

**PROPOSED FINDINGS OF FACT**

537. Through its binding interconnection agreements, Ameritech Wisconsin offers, among other things, physical caged and cageless collocation, as well as virtual collocation within its central offices. Tr. Vol. 4 at 1233; AW Init. Br. at 323.

538. ***Adjacent On-site Collocation.*** Ameritech Wisconsin also provides adjacent collocation on its premises where space within Ameritech Wisconsin's eligible structures for collocation is legitimately exhausted. Tr. Vol. 4 at 1241 (Debetaz Rebuttal). Ameritech Wisconsin fulfills that obligation through one or more of its approved interconnection agreements. *Id.* at 1233. However, due to the case-specific nature of adjacent on-site collocation, Ameritech Wisconsin does not propose one-size-fits-all rates. Rather, the rates for a specific adjacent on-site arrangement can be calculated using the appropriate rate elements from Ameritech Wisconsin's physical caged or cageless collocation offerings. AW Init. Br. at 324.

539. ***Adjacent Off-site Collocation.*** The CLEC Coalition proposes rates for "Adjacent Off-site Collocation." Ameritech Wisconsin, on the other hand, does not propose rates, since it

sharing a 550 square foot collocation cage (without interior partitioning), and purchasing space on a linear foot basis, rather than on a square foot basis. Tr. Vol. 10 at 3575. There are no interconnection agreements (or tariffs for that matter) that include these terms and conditions. Tr. Vol. 4 at 1246 (Debetaz Rebuttal), 1292 (Debetaz Redirect); Tr. Vol. 10 at 3809-10 (Turner Cross). Caged common collocation is not, and has never been, offered in Wisconsin. Tr. Vol. 4 at 1246; AW Init. Br. at 327-28.

541. Ameritech Wisconsin offers what it refers to as “Shared Cage Collocation,” which permits two or more collocators to enter into an agreement amongst themselves to share a collocation cage of a size of their choosing, and to divide the space up as they deem appropriate. *Id.*

#### **PROPOSED CONCLUSIONS OF LAW**

542. This docket is, at its core, a proceeding to establish rates for services provided by Ameritech Wisconsin to CLECs pursuant to established interconnection agreements. This premise applies to collocation in the same manner it applies to any service being provided by Ameritech Wisconsin. This is not a proceeding to establish new forms of collocation, or to set rates for some hypothetical form of collocation that may, at some point in the future, be provided by Ameritech Wisconsin. AW Init. Br. at 322-23.

543. Any attempt by this Commission to impose upon Ameritech Wisconsin the obligation to provide a collocation arrangement not part of an approved interconnection agreement would run afoul of the 1996 Act and is preempted by it.<sup>16</sup> See AW Init. Br. at 323 &

544. Moreover, the record simply does not support the imposition of any requirements beyond those in approved interconnection agreements. No party to this proceeding set forth any proposed terms and conditions for any particular collocation arrangement that it believes ought to be offered. Thus there is no record evidence upon which this Commission could evaluate a request for imposition of such terms and conditions. And since no CLEC submitted any evidence on this subject, Ameritech Wisconsin had no opportunity (nor frankly any reason) to submit evidence of its own. *Id.* at 323; AW Reply Br. at 233-34.

545. ***Adjacent On-site Collocation.*** We agree with Ameritech Wisconsin that, due to the case-specific nature of adjacent on-site collocation, it is not feasible nor desirable to attempt to set one-size-fits-all rates for adjacent on-site collocation. Rather, the rates for a specific adjacent on-site arrangement can be calculated using the appropriate rate elements from Ameritech Wisconsin's physical caged or cageless collocation offerings. To the extent that an appropriate rate is not found elsewhere, rates should be determined on a case-by-case basis, based on Ameritech Wisconsin's actual costs. AW Init. Br. at 324.

546. ***Adjacent Off-site Collocation.*** We reject the CLEC Coalition's attempts to set rates for "Adjacent Off-site Collocation." What the CLECs are referring to as "Adjacent Off-site Collocation" is, in fact, not a collocation arrangement at all. AW Init. Br. at 324-27.

547. The "Adjacent Off-site Collocation" offering that AT&T and the other CLECs in the Coalition are seeking to create is inconsistent with the 1996 Act. Section 251(c)(6) defines collocation as "the duty to provide, on rates, terms, and conditions that are just, reasonable, and

51.323(k)(3); 47 C.F.R. 51.5 (defining premises); *Advanced Services Order*, ¶¶ 19-20 and n.27; *Order on Reconsideration*, ¶ 44; *GTE v. FCC*, 205 F.3d 416 (D.C. Cir. 2000), 425; *U.S. West v. American Tel. Technology, Inc.*, No. C00-05861, at pp. 2-4 (W.D. Wash. Nov. 20, 2000); ICC Order, Docket 99-0615, August 9, 2000, pp. 13-14. *See* AW Init. Br. at 324-27.

548. **Common Collocation.** We reject the CLECs' request that we set rates for what their collocation cost model calls "Caged Common Collocation." There are no interconnection agreements (or tariffs for that matter) that include these terms and conditions, and the CLECs have not proposed any. Tr. Vol. 4 at 1246 (Debetaz Rebuttal), 1292 (Debetaz Redirect); Tr. Vol. 10 at 3809-10 (Turner Cross). To require Ameritech Wisconsin to offer Caged Common Collocation for the first time in this proceeding would be improper, for several of the same reasons that it would be improper to impose what the CLECs refer to as "Adjacent Off-site Collocation." AW Init. Br. at 327-28.

549. We find that the Ameritech Wisconsin arrangement – shared caged collocation – is consistent with the FCC's *Advanced Services Order*, ¶ 41, and we will set rates for that form of collocation. AW Init. Br. at 327-28.

- (2) **Whose collocation model should be used as a basis of determining collocation costs, Ameritech's model or the CLECs model (CCM)? Include supporting reasons based on identified strengths and weakness of the two models.**

#### SYNOPSIS OF TESTIMONY

Richard Florence describes how Ameritech Wisconsin developed its collocation costs. *See* Tr. Vol. 6 at 1644-62 (Ho Direct, as adopted by Florence). Mr. Florence also addresses the CLECs' criticisms of Ameritech Wisconsin's costs. *Id.* at 1538-39, 1549-70 (Florence Rebuttal). Craig Conwell and Roy Debetaz identify various shortcomings in the CLECs' Collocation Cost

550. Ameritech Wisconsin's collocation costs are set forth in the Ameritech Cross-Connect Service for Interconnection ("ACCSI"), Collocator-to-Collocator Cross-Connect Service for Interconnection ("CCCSI"), Physical Collocation Service, Cageless Physical Collocation and Virtual Collocation Service Cost Studies. Ex. 116C. These studies utilize Ameritech Wisconsin's Collocation Cost Template ("CCT") to identify cost components for each form of collocation offered by Ameritech Wisconsin. These individual components are then mapped to the various collocation cost elements underlying the collocation rate elements. Tr. Vol. 6 at 1645.<sup>17</sup> AW Init. Br. at 328-29.

551. Ameritech Wisconsin used the CCT to study the following types of collocation: physical collocation – standard cage; physical collocation – cageless; physical collocation – shared cage; virtual collocation. *Id.* at 329.

552. The CCT develops the non-recurring and recurring costs of components and activities associated with provisioning collocation. These cost components serve as inputs to the collocation cost studies, where they map directly to or are combined to match the Ameritech Wisconsin collocation cost elements. Tr. Vol. 6 at 1647. The CCT uses central office design inputs and standard unit cost inputs that were developed consistently across all the forms of collocation studied. Tr. Vol. 6 at 1648; AW Init. Br. at 329.

553. The central office design inputs used in the CCT represent actual requirements based upon Ameritech's experience in provisioning central office collocation. Tr. Vol. 6 at 1648. For material unit costs, the CCT uses the installed cost of components utilized in

providing the cost data pertinent to that workgroup's function. The activity times used in the CCT represent the time required to provision a collocation arrangement using methods which have been developed based upon Ameritech Wisconsin's extensive experience in provisioning such services. A representative from the specific work groups involved in the various collocation functions provided the activity times used in the cost template. Tr. Vol. 6 at 1649-50; AW Init. Br. at 329-30.

554. For caged and cageless physical collocation, the primary cost components are: 1) Central Office Build Out ("COBO") and Project Management; 2) Floor Space Usage; 3) DC Power Provisioning; 4) DC Power Consumption; 5) Fiber Cable Placement; and 6) Miscellaneous and Optional Costs. Tr. Vol. 6 at 1653; AW Init. Br. at 330-31.

555. Ameritech Wisconsin's virtual collocation costs reflect the average costs for standard virtual collocation in any Ameritech central office in Wisconsin. Virtual collocation costs include the following main costs components: 1) Standard Bay and Floor Space Usage; 2) DC Power Provisioning; 3) DC Power Consumption; 4) Fiber Cable Placement; 5) Project Management; and 6) Miscellaneous Costs. Tr. Vol. 6 at 1660; AW Init. Br. at 333-34.

556. These costs for virtual collocation were developed in the same manner as those that were developed for physical caged and cageless collocation. Since virtual collocation allows for the placement of CLEC designated equipment within Ameritech's equipment line-ups, there is no requirement for a specific CLEC space and thus no central office build out is calculated under the virtual collocation cost section of the template. Tr. Vol. 6 at 1660; AW Init. Br. at



charges. Likewise, expenses that are incurred on a periodic or continuing basis are recovered through monthly recurring charges. AW Init. Br. at 340-42.

*The CLEC CCM*

558. The CCM employs a Hypothetical Central Office or Scorched Earth approach that assumes that all central offices are built specifically to facilitate collocation. Specifically, the CCM is based on a “model” central office, not on any particular existing central office. Tr. Vol. 10 at 3799. It is not based on the characteristics of an Ameritech Wisconsin central office, or the central office of any particular ILEC. *Id.* The “model” central office employed by the CCM is four stories tall, including a basement. It contains 60,000 square feet of space, including 12,000 square feet of space for telecommunications space on each of the three aboveground floors. The “model” central office has a capacity for 150,000 phone lines. The CCM does not make any modifications to its “model” based on state-specific factors (*e.g.*, population, size of state, number of phone lines per household); therefore, for purposes of the CCM, central offices in Wisconsin are considered identical to those in California, Massachusetts and Alaska. *Id.* at 3800-02; AW Init. Br. at 336-37.

559. The CCM assumes that the collocation area is ideally located to minimize cable and rack lengths. The CCM does not include the cost for site conditioning; instead it assumes that any such cost is covered in the building cost of the Hypothetical Central Office. *Id.* at 338.

560. The “model” central office devotes 2,750 square feet of telecommunications space to collocation space. Tr. Vol. 10 at 3583, Figure 4. The “model” central office assumes

561. A medium sized central office in Wisconsin serves **[Begin Conf\*\*\*\*\*  
\*\*\*\*\*End Conf]** residential lines, while a large office services approximately **[Begin  
Conf\*\*\*\*\*End Conf]** residential lines. Ex. 99C, p. 26; AW Init. Br. at 337. There is no evidence in the record that any Ameritech Wisconsin central office has as many as 20 different collocators.

562. The CLECs categorize costs based on whether or not they are reusable and sharable, and treats all reusable and sharable costs as recurring. CLEC Br. at I.H.-28.

563. The CLEC CCM uses time estimates that were determined based on roundtable discussions similar to what the NRCM used. These time estimates are lower than time estimates developed through AT&T's TOC studies for similar activities. AW Init. Br. at 351.

#### **PROPOSED CONCLUSIONS OF LAW**

564. The Commission has before it two starkly different models that each purport to calculate the costs that Ameritech Wisconsin incurs to provide virtual and physical collocation to CLECs. However, only the Ameritech Wisconsin model provides for full recovery of the costs that Ameritech Wisconsin will incur to provision collocation; the CLEC proposed model is based on faulty methodology and arbitrarily low inputs. AW Init. Br. at 328.

565. The Ameritech Wisconsin collocation model is a comprehensive model that accurately identifies all the cost components related to physical and virtual collocation. It is based on Ameritech Wisconsin's existing network, but appropriately applies forward-looking technologies and efficiencies to accurately capture the costs that Ameritech Wisconsin will incur

approximation of the forward-looking, long run costs it incurs in accommodating collocated CLECs. *Advanced Services Order*, ¶ 41; *Second Report and Order, In the Matter of Local Exchange Carriers' Rates, Terms and Conditions for Expanded Interconnection Through Physical Collocation For Special Access and Switched Transport*, CC Docket No. 93-162, FCC 97-208 (rel. June 13, 1997 (“*Second Report and Order*”)), ¶ 30. See AW Init. Br. at 335-36.

567. We also agree that an ILEC is entitled to recover costs to reasonably protect its network, and the costs associated with the security measures employed by Ameritech Wisconsin are recoverable. (E.g., security cameras, card readers, partitions, ID badges). *Advanced Services Order*, ¶ 48; *GTE*, 205 F.3d at 426; AW Init. Br. at 336.

568. We find that Ameritech Wisconsin’s division of charges as being either nonrecurring or recurring is fully consistent with the cost-recovery principles set forth by the Act and the FCC’s implementing regulations. As Mr. Florence explained, “[t]he proper costing approach ensures that the party that causes the cost pays for the actual cost. . . . This concept is reflected in Ameritech Wisconsin’s collocation cost study.” Tr. Vol. 6 at 1552-53. The CLEC approach, on the other hand, while “systematic,” is contrary to these established cost recovery mechanisms. The distinction that the CLECs attempt to draw – between assets that are reusable and sharable and those that are not – is a false one. AW Init. Br. at 340-42; AW Reply at 243-45.

569. We reject the hypothetical “model” central office that forms the basis of the CLEC CCM. The Eighth Circuit has clearly recognized that the CLECs’ hypothetical central

570. We also agree with Ameritech Wisconsin that the CLEC CCM has several other fatal defects: (1) it inappropriately recovers one-time expenses on a recurring basis (*see* AW Init. Br. at 340-42); (2) it fails to reflect best practices (*id.* at 339-40); (3) the assumptions made by the CCM relating to caged physical collocation are flawed (*id.* at 342-43); (4) the costs proposed for the CCM's alternative to Ameritech Wisconsin's Shared Caged Collocation – "Common Caged Collocation" – lead to underrecovery of Ameritech Wisconsin's costs (*id.* at 344); (5) the CCM's proposed rates for cageless collocation are inappropriately based on costs associated with virtual collocation (*id.* at 345-46); (6) the CCM unreasonably assumes that adjacent structures will always be placed 4 feet from the exterior wall of the central office (*id.* at 347-48); (7) it assumes an unreasonably small footprint for equipment in virtual and cageless physical arrangements (*id.* at 348); (8) it substantially underestimates collocation costs by omitting whole categories of costs and using inappropriate resource quantities and costs where it does include them (*id.* at 349-50); (9) the CCM substantially underestimates the forward-looking costs of key collocation elements by using resource quantities and resource costs that consistently produce inaccurate and low cost estimates, or omits costs due to outright errors or by deviating from SBC's current and forward-looking engineering design and construction practices (*see* Tr. Vol. 4 at 1324; AW Init. Br. at 350-53); (10) key cost data, such as planning activity times and material and installation costs for HVAC, physical cable racking, power delivery and power consumption, are inadequately documented in the CCM, making it difficult to verify the accuracy of key CCM costs (*id.* at 349, 356-58); (11) the CCM misuses the R. S. Means building construction data

vendor quotes used by the CCM, in terms of number obtained or which one was chosen (*id.* at 355-56).

571. Furthermore, we agree with Ameritech Wisconsin that AT&T's TOC studies demonstrate a significant disparity between what AT&T and the other CLECs are advocating here as far as time estimates, and what AT&T actually claims it experiences when it is creating a study to justify its costs. This casts serious doubt on the reliability of the CCM. This Commission therefore rejects the CLEC time estimates in favor of Ameritech Wisconsin's activity times, which are based on actual people performing the actual tasks at hand, and are commensurate with what AT&T experiences when AT&T actually perform various tasks. AW Init. Br. at 351.

572. We disagree with the criticisms of the Ameritech model put forth by the CLECs. First, we reject the CLECs' claim that Ameritech Wisconsin has failed to provide costs for all of the methods of collocation. CLEC Init. Br. at I.H.-25. As discussed above, Ameritech Wisconsin has proposed rates for all forms of collocation that are available to CLECs in Wisconsin, or, in the case of adjacent on-site collocation, proposed that rates be determined on a case-by-case basis, owing to the fact-specific nature of each arrangement. *See also* AW Reply Br. at 242.

573. Second, we find no merit (nor support for) the CLECs' claim that Ameritech Wisconsin's costs are higher than those reported in the CLECs' CCM. CLEC Init. Br. at I.H.-5, 25. Similarly, the CLECs claim that Ameritech Wisconsin's costs are higher than "other external

574. Third, the CLECs object that Ameritech Wisconsin utilizes a per-foot basis to calculate certain costs. CLEC Br. at I.H.-26-27. This issue is discussed at length in section I.H.(3) *infra*. See also AW Reply Br. at 243.

575. We also reject the CLECs' allegation that Ameritech Wisconsin is somehow "goldplating" its collocation arrangements. CLEC Br. at I.H.-8. The CLECs offer no factual support for this claim. AW Reply Br. at 245.

(a) If Ameritech's model is selected;

1. What inputs should be adjusted and why?
2. Are there any other adjustments that should be made to collocation costs?

SYNOPSIS OF TESTIMONY

See Section I.H.(2) above.

PROPOSED FINDINGS OF FACT

576. See Section I.H.(2) above.

577. **Floor Space Charge.** In order to take into account that space outside a physical collocation cage that is needed to provide access and to account for building obstructions, both Ameritech and the CLECs perform a gross-up calculation. Ameritech proposes [Begin Conf\*\*\*\*\*End Conf] square feet for each 100 square feet of collocation equipment space; the CLECs propose 37.5 per 100 square feet. CLEC Br. at I.H.-29-30; AW Reply Br. at 247.

578. Ameritech Wisconsin's figure is based on its experience provisioning collocation space, and takes into account the additional space required for obstructions such as columns,

collocation, Ameritech Wisconsin determined the footprint of a single equipment bay. All that Ameritech Wisconsin has taken into account in determining the footprint used by an equipment bay in a cageless or virtual environment is the space directly under and in front and behind the equipment bay, as well as on either side of the row of bays. This is directly analogous to the space within the 100 square-foot cage, which already includes space in front of and behind equipment bays, as well as space on the end of the rows necessary to access each row. The gross-up performed by Ameritech Wisconsin does *not* address that type of space, in either the caged or cageless/virtual setting. What the gross-up does address is space taken up by building obstructions (such as pipes, cable racks and support columns) and the space needed to reach the equipment area. As with caged collocation, there are obstructions in a cageless or virtual environment. Tr. Vol. 6 at 1558; AW Reply Br. at 248.

580. In addition to the gross-up to account for access to space and building obstructions, Ameritech Wisconsin performs a second gross-up calculation to account for the collocater's proportionate share of common building elements. In addition to the central office equipment area, a central office building must have associated floor space that services the central office equipment area. The support space includes, but is not limited to, stairs and stairwells, elevator shafts, mechanical equipment rooms, common hallways, electrical service entry, generator and fuel tank room and building delivery areas. All of these items provide essential functions for the building and benefit both the collocators and Ameritech Wisconsin.

Tr. Vol. 6 at 1556; AW Reply Br. at 249.

number of cables that will occupy the rack. Tr. Vol. 6 at 1559-60. In his testimony, Mr. Florence explained, step-by-step, how Ameritech Wisconsin arrived at the **[Begin Conf\*\*\*\*\*End Conf]** fill factor. See Tr. Vol. 6 at 1500; AW Reply Br. at 249-51.

582. **Power Consumption.** Ameritech Wisconsin calculated its power consumption charge on a fuse amp, rather than a load amp, basis. Ameritech Wisconsin accounted for this approach by applying a 66% load factor to the AC usage cost element. AW Reply Br. at 251-52.

583. **Cross-Connect Block.** Ameritech Wisconsin applied the 377C investment category to its 200 Conductor Electrical Cross-Connect Block. The source of this investment is Ameritech Wisconsin's switching cost model, ARPSM, which identifies various 377C switching investments. AW Reply Br. at 252.

584. **Central Office Build Out (Nonrecurring).** There is no dispute among the parties that travel time will be incurred and that Ameritech Wisconsin is entitled to recover the costs associated with such travel. However, the CLECs object that the travel time incurred by the Collocation Coordinator should be the same as that incurred by the CSPEC (Central Office Engineer). The travel done by the Collocation Coordinator and the travel done by the CSPEC are not automatically the same. The role of the Collocation Coordinator involves more trips to central offices than the CSPEC, based on Ameritech Wisconsin's actual experience in provisioning collocation. AW Reply Br. at 256.

585. Ameritech Wisconsin incurs significant expense associated with administrative tasks performed by engineers. In his testimony, Mr. Florence identified each of the personnel



Manager), Outside Plant (OSP) Engineer, Power Engineer, Central Office Engineer (now referred to as the Common Systems Space Planner (CSSP)) Digital Transport Engineer (DTE) and the Quality Auditor for implementing the physical collocation service. Additionally, we now also have a Collocation Coordinator Center Manager who also provides for certain design and management functions, as well.” Tr. Vol. 6 at 1565. Mr. Florence also identified the specific tasks associated with each. *Id.* at 1565-68; AW Reply Br. at 256-58.

586. The asbestos abatement evaluation charge is not for the removal of asbestos; it is for the work effort to check if asbestos is present. Ameritech Wisconsin incurs this cost because of the CLECs’ request for collocation space, not because Ameritech wants to use the space. Tr. Vol. 6 at 1568-69; AW Reply Br. at 258.

587. All of the collocation preparation work is not usable by future collocators. Many of these costs are CLEC-specific and may not be suitable for a future CLEC. Moreover, there is no guarantee that future demand for caged physical collocation will be sufficient to ensure that even reusable COBO work is recovered. CLECs have a variety of options available to them, including virtual, shared caged and cageless collocation, as well as other non-collocation means of obtaining access to UNEs and interconnection to Ameritech Wisconsin’s network. AW Reply Br. at 258-59.

#### **PROPOSED CONCLUSIONS OF LAW**

588. The Ameritech Wisconsin model accurately calculates collocation costs as mandated by the 1996 Act for the reasons stated above in Section I.H.(2). Having taken into

590. **Floor Space Charges.** The CLECs first object to the gross-up calculation that Ameritech Wisconsin performs to take into account the space outside a physical collocation cage that is needed to provide access and to account for building obstructions. We conclude that Ameritech Wisconsin's gross-up calculation is reasonable and consistent with TELRIC. AW Reply Br. at 247.

591. We also disagree with the CLECs' objection that the gross-up performed by Ameritech Wisconsin should not properly be applied to cageless physical and virtual collocation and should be zero. CLEC Br. at I.H.-30. The CLECs apparently do not understand how the floor space charge for cageless collocation was determined. We find Ameritech Wisconsin's calculation to be reasonable and appropriately applied to cageless physical and virtual collocation. AW Reply Br. at 248.

592. We also conclude that the second gross-up calculation performed by Ameritech Wisconsin to account for the collocator's proportionate share of common building elements is reasonable and consistent with TELRIC. AW Reply Br. at 249.

593. **Riser Space.** The Commission finds no merit in the CLECs' objections with respect to riser space. The CLECs refer to the *Michigan* commission's decision on riser space; it is entirely unclear what objections the CLECs are attempting to raise here, if any. Vague references to proceedings in another state are not sufficient to raise them here. AW Reply Br. at 249-50.

594. Nor is there merit to the objection that the CLECs have to riser space cost relating

the element.” AW Init. Br. at 43, *citing First Report and Order*, ¶ 682. This is true for the fill factors here as well. AW Reply Br. at 250.

595. **Power Consumption.** We do not agree with the CLECs’ objections regarding power consumption. The CLECs state that it is “unusual,” at least in the mind of one of the CLECs’ witnesses, that Ameritech Wisconsin calculated its power consumption charge on a fuse amp, rather than a load amp, basis. CLEC Br. I.G.-31. The CLECs do not suggest that there is anything wrong with Ameritech Wisconsin’s approach, and even concede that Ameritech Wisconsin accounted for this approach by applying a 66% load factor to the AC usage cost element. *Id.* at 32. AW Reply Br. at 251.

596. The CLECs then suggest that a similar load factor should have been applied to the DC Power Investment cost element. *Id.* We disagree. If one is using only 66% of the capacity of the equipment, generally one will only draw 66% of the total AC power load. This does not mean that a similar calculation is appropriate for an *investment* element. AW Reply Br. at 251-52.

597. **Cross-Connect Block.** This objection also has no merit. We find supporting documentation for Ameritech Wisconsin’s unit investment cost for 200 Conductor Electrical Cross-Connect Blocks to be more than adequate. Tr. Vol. 6 at 156; AW Reply Br. at 252. Nor did Ameritech Wisconsin incorrectly apply the 377C investment category instead of 357C. *Id.*

598. **DSX-1 Panel.** Similarly, there is no merit to the CLECs’ claim that Ameritech Wisconsin has provided no supporting documentation for its proposed DSX-1 Panel cost. CLEC

599. ***DS1/DS3 Repeaters.*** The CLECs' criticism of DS1/DS3 repeaters misses the mark. They object on the ground that "repeaters only become necessary when the cable lengths for DS3 and DS1 circuits become too long," and quote to an unidentified FCC order. CLEC Br. at I.H.-35. We agree with Ameritech Wisconsin that where repeaters are necessary (which they typically are not), Ameritech Wisconsin ought to be compensated if it bears the cost of installing them. AW Reply Br. at 253-54; Tr. Vol. 6 at 1563.

600. ***Central Office Build Out (Nonrecurring).*** The CLECs falsely claim that Ameritech Wisconsin has not provided adequate supporting documentation for its central office build-out ("COBO") charge. CLEC Br. at I.H.-35. We concur with Ameritech Wisconsin that it explained at length the nature of its COBO charge in the pre-filed direct and rebuttal testimony of Mr. Florence (*see* Tr. Vol. 6 at 1567-69; 1653-56), and provided further support through its collocation costs studies (Ex. 116C), the Collocation Cost Template and the CCT support documentation (*see, e.g.*, CCT Support, Tabs 8.4, 8.5.) *See also* AW Reply Br. at 254.

601. We also disagree with each of the four specific objections to the Ameritech Wisconsin COBO charge.

602. The COBO charge does not represent improper "retrofitting" costs. *See* AW Init. Br. at 335-36; AW Reply Br. at 255. Both the FCC's *Advanced Services Order* (at ¶ 41) and *Second Report and Order* (at ¶ 30) support Ameritech Wisconsin's right to recover these types of collocation costs. AW Init. Br. at 335-36; AW Reply Br. at 255. In sum, Ameritech Wisconsin's costing approach is consistent with the TELRIC methodology and provides a

603. Ameritech Wisconsin's COBO charge does not include excessive levels of administrative and travel costs. AW Reply Br. at 256-58.

604. The CLECs object to the charge for asbestos abatement evaluation. We disagree with their objection. AW Reply Br. at 258.

605. Finally, the CLECs object that the COBO charge should be recovered on a recurring basis. As discussed in detail *infra* and at AW Init. Br. (at 340-42), the CLECs' position is wrong. *See also* AW Reply Br. at 258-59.

606. **Power Delivery.** Finally, the CLECs' criticism of Ameritech Wisconsin's power delivery charge also fell short of the mark for the reasons stated in Ameritech Wisconsin's briefs. AW Reply Br. at 259-60.

**(b) If the CLEC CCM model is selected:**

1. What inputs should be adjusted and why?
2. Are there any other adjustments that should be made to collocation costs?

**SYNOPSIS OF TESTIMONY**

In their discussion of the errors contained in the CLEC CCM, Craig Conwell and Roy Debetaz make a number of suggested changes to CCM inputs. Tr. Vol. 6 at 1322-44 (Conwell Rebuttal); *id.* at 1235-46, 1250-58 (Debetaz Rebuttal). *See also* AW Init. Br. at 362-64 and Confidential Attachment 1.

**PROPOSED FINDINGS OF FACT**

607. *See* Section I.G.(1) above.

**PROPOSED CONCLUSIONS OF LAW**

[Ameritech Wisconsin believes that its model accurately calculates collocation costs and

Florence each identified numerous adjustments that would be required to be made to the CCM in order for it to accurately report the costs that Ameritech Wisconsin incurs to provide collocation to CLECs. AW Init. Br. at 363.

609. With its initial brief, Ameritech Wisconsin attached as Confidential Attachment 1, the specific adjustments that should be made to the CCM, if the Commission elects to use the CCM as the model for collocation costs. Attachment 1 includes separate spreadsheets for physical caged, physical common and virtual collocation. AW Init. Br. at 363. We hereby adopt those adjustments as required by TELRIC.

610. As discussed in Section I.H.(4) below, it is not appropriate to provide standardized rates for adjacent on-site collocation because the unique circumstances of each adjacent on-site arrangement will dictate how costs are incurred by Ameritech Wisconsin. Setting rates at this time is especially inappropriate since CLECs are not presently collocated with Ameritech Wisconsin through adjacent on-site arrangements, and the CCM version of adjacent on-site collocation bears no resemblance to how Ameritech Wisconsin would provision such collocation if it were requested by a CLEC. AW Init. Br. at 363.

611. Likewise, this Commission will not set standard rates for the CLECs' proposed "off-site adjacent collocation" for all of the reasons that apply to on-site adjacent collocation, and, most importantly, because the CLECs' proposed off-site arrangements are not collocation at all. *Id.*

612. Finally, as discussed above, the CLECs inappropriately base the rates for physical

of the CCM should be rerun using the assumptions relied upon for physical caged collocation.

*Id.* at 364.

(3) Should collocation rates be set in terms of per foot costs or should averaged distances be used to represent any collocation arrangement?

(a) If average distances are selected what average distances should be used?

#### SYNOPSIS OF TESTIMONY

Richard Florence addresses the basis for Ameritech Wisconsin's position at Tr. Vol. 6 at 1549-52 (Florence Rebuttal). ✓

#### PROPOSED FINDINGS OF FACT

613. In its *First Report and Order* (§ 691), the FCC stated that costs “must be attributed on a cost causative basis” and that costs are “causally related to the network element being provided if the costs are incurred as a direct result of providing the network elements, or can be avoided, in the long run, when the company ceases to provide them.” AW Init. Br. at 364.

614. The interconnection agreements between the CLECs and Ameritech Wisconsin have dispute resolution provisions which enable CLECs to challenge any future disputes regarding determination of cabling distances. Moreover, the Commission itself has a mechanism by which a CLEC may file a complaint if it believes that it is being subjected to discriminatory treatment. AW Reply Br. at 262-63.

#### PROPOSED CONCLUSIONS OF LAW

615. We agree with Ameritech Wisconsin's proposal to base rates for certain

determine where CLEC equipment will be collocated. *GTE*, 205 F.3d at 426; AW Init. Br. at 363-64; AW Reply Br. at 261.

616. There is no merit to the assertion by the CLECs that the Ameritech Wisconsin approach takes the ability to determine if costs are cost-based or nondiscriminatory away from the Commission. The Commission has had every opportunity in this docket to determine if the per-foot rates proposed by Ameritech Wisconsin are cost-based and finds they are. We further note that there are suitable remedies available to CLECs if a dispute arises in the future. AW Init. Br. at 262.

- (4) **Should collocation rates be standardized rates, or should any collocation rates be determined on an individual basis?**

#### **SYNOPSIS OF TESTIMONY**

*See* Section I.H.(1).

#### **PROPOSED FINDINGS OF FACT**

617. Ameritech Wisconsin has proposed standardized rates for physical collocation within a central office (caged, cageless and shared), as well as virtual collocation. With respect to these forms of collocation, there are numerous common elements among them to make development of standardized rates appropriate. Because adjacent on-site collocation depends on the unique circumstances of each individual arrangement, Ameritech Wisconsin treats applications for adjacent on-site collocation as non-standard requests. Tr. Vol. 4 at 1270-71, 1293. To date, no carrier has requested an on-site adjacent collocation arrangement, so Ameritech Wisconsin does not yet have the historical experience upon which to calculate its



security, access and power delivery. The cost to the CLEC will depend on the specific steps identified. AW Init. Br. at 366-67.

#### **PROPOSED CONCLUSIONS OF LAW**

618. We agree with Ameritech Wisconsin that, owing to the unique characteristics of each on-site adjacent collocation arrangement, it is not appropriate to set standardized rates for this form of collocation. Instead, we direct that they be priced on a non-standard basis. AW Init. Br. at 366-67.

##### **I. Other Issues**

- (1) **If docket 6720-TI-160 (Ameritech OSS) requires cost based pricing, what method of determining cost for directory assistance, listing database, and operator services should be used?**

#### **SYNOPSIS OF TESTIMONY**

William Palmer describes the model used by Ameritech Wisconsin to calculate the recurring costs associated with operator services and directory assistance. *See* Tr. Vol. 2. at 721 (Palmer Direct); *see also* Ex. 116C (OS/DA Unbundled Cost Study, Tab 1). ✓

#### **PROPOSED FINDINGS OF FACT**

619. The recurring costs for the unbundled OS/DA elements consist of the ongoing capital costs and operating expenses to provide OS and DA (Ex. 116C (OS/DA Unbundled Cost Study, Tab 1)) and were developed primarily using the Operator Analysis Cost Information System ("OACIS"). The recurring cost development for information call completion required additional information outside of the OACIS model; this information was taken from ARPSM and NUCAT. The associated nonrecurring costs reflect the costs for the custom branding related to these network elements; specifically, the OS/DA nonrecurring costs are for the work required

operator assisted/mechanized calling card services. Ex. 18. The system develops costs on a usage basis for each module; the costs are then translated into cost per call utilizing the usage characteristics of each call. Ex. 18. AW Init. Br. at 368-9.

621. Ameritech Wisconsin contends that it is not required to offer OS/DA as a UNE at cost-based rates. Rather, Ameritech Wisconsin contends that it may charge market-based rates if it offers “customized routing or a compatible signaling protocol” for CLECs’ OS/DA traffic. *UNE Remand Order*, ¶ 442; AW Init. Br. at 368, n.181.

622. As explained in its submissions in Docket No. 6720-TI-160, Ameritech Wisconsin offers customized routing of OS/DA for all CLECs, under tariff and contract, in all its central offices throughout Wisconsin. *Id.*

#### **PROPOSED CONCLUSIONS OF LAW**

623. To date, in Docket No. 6720-TI-160, the Commission has not yet ruled whether operator services (“OS”), directory assistance (“DA”) and listing databases should be provided as UNEs at cost-based rates.

624. At this time, we conclude that Ameritech Wisconsin is not required to offer OS/DA services as UNEs since it provides customized routing of OS/DA for all CLECs, under tariff and contract, in all its central offices throughout Wisconsin. AW Init. Br. at 368, n.181.

625. Our holding here is consistent with the Arbitration Award in Docket No. 05-MA-120 (the Ameritech Wisconsin/AT&T arbitration), in which the Panel agreed with Ameritech Wisconsin’s position. “The Panel therefore agrees with Ameritech that OS/DA need not be

627. We note that the CLECs did not address this issue in their briefs.

(2) **Method of determining costs of 911 call related databases.**

**SYNOPSIS OF TESTIMONY**

William Palmer testified regarding the method by which Ameritech Wisconsin determined its costs for 911 call-related databases. Tr. Vol. 2 at 744-49 (Palmer Direct).

**PROPOSED FINDINGS OF FACT**

628. In Wisconsin, 911 service is established by the counties. *Id.* at 230. While the counties establish 911 service, that service is provided over Ameritech Wisconsin's network and Ameritech Wisconsin incurs costs as a result. Ameritech Wisconsin has not submitted cost studies for the costs associated with the ongoing operations of the 911 system, because those costs are recovered from the counties under contracts between the counties and Ameritech Wisconsin. Tr. Vol. 2 at 744, 747; AW Init. Br. at 369.

629. However, when the customers of CLECs, Commercial Mobile Radio Service ("CMRS") providers and independent providers use the 911 system, additional costs are incurred by Ameritech Wisconsin. These costs are not recovered under Ameritech Wisconsin's contracts with the counties. *Id.* at 747-48. Thus, Ameritech Wisconsin has filed two 911-related costs studies in this docket that capture these additional costs: the Wisconsin 2000 Emergency Number Service Access ("ENSA") Cost Study, which covers land-based 911 service, and the Wisconsin 2000 Wireless Emergency Number Service Access ("WENSA") Cost Study (Phase 1, Non-Call Path Associated Signaling (NCAS)), which covers 911 service provided to wireless callers. These studies identify the TSLRIC (i.e., price floors) associated with allowing customers

allowing the independent, CLEC or CMRS provider to access, via a digital or analog interface, the 911 system; (b) ANI/ALI/SR Database Management, which is the cost to create, maintain, and store the records of an independent, CLEC or CMRS provider in the SR/ALI database; and (c) 911 Selective Router Switch Administration, which is the non-recurring cost to create translations in the SR to allow an independent, CLEC or CMRS provider access to the 911 system. AW Init. Br. at 370.

631. The WENSA cost study identifies the costs of ALI Database Port Connectivity. These costs are incurred when expanding the capacity of the SR/ALI database to contain the additional information required for processing wireless calls. Tr. Vol. 2 at 747. Additional components are needed when a wireless carrier wishes to interconnect with the 911 network because, in the wireless context, the customer is no longer calling from a fixed position. Tr. Vol. 1 at 233; AW Init. Br. at 370-71.

#### **PROPOSED CONCLUSIONS OF LAW**

632. Costs developed in Ameritech Wisconsin's ENSA and WENSA studies reflect the additional costs of serving independents, CLECs and CMRS providers and do not reflect the costs paid for by the counties through contracts with Ameritech Wisconsin. AW Init. Br. at 371.

633. The ENSA and WENSA studies filed in this proceeding appropriately identify the price floors for these services, and are hereby adopted. *Id.*

**(3) Method of determining the cost of signaling.**

#### **SYNOPSIS OF TESTIMONY**

634. Access to Signaling System 7 (“SS7”) provides access to the Ameritech Wisconsin’s Common Channel Signaling (CCS) network, including access to signaling ports and links. The Ameritech CCS Network is a digital network that carries signaling information and interfaces with the voice/data network. The network uses the SS7 protocol for signaling functions such as routing, establishing connections, providing billing information, validating calling cards and other functions. Ex. 116C (Signaling System 7 (SS7) Unbundled Master Cost Study, Tab 1); AW Init. Br. at 371.

635. Ameritech Wisconsin developed the recurring costs for the unbundled SS7 network elements using TELRIC methodology. The study used the Ameritech Cost Analysis Resource Manual (ACAR), the Common Channel Switching Cost Information System (CCSCIS) and the Economic Costs of Network Facilities/Capital Costs (ECONS/CAPOST) cost models. The associated nonrecurring costs reflect the costs for the translations or software instructions required to provision unbundled SS7 network elements, including installation and removal of Originating Point Codes (OPCs), Global Title Address Translations (GTATs) and STP Ports. Tr. Vol. 2 at 721; AW Init. Br. at 372.

#### **PROPOSED CONCLUSIONS OF LAW**

636. The cost model proposed by Ameritech Wisconsin to calculate its signaling costs is reasonable and consistent with TELRIC. We hereby adopt the rates proposed by Ameritech Wisconsin based on use of that model.

637. We note that the CLECs did not address this issue in their briefs.

638. The costs incurred by Ameritech Wisconsin to provide directories are not presently included in the cost studies that were submitted in this docket. Facilities-based CLECs may request and negotiate arrangements with Ameritech's directory publishing affiliate to provide for the initial and secondary delivery of white pages directories to their switched-based customers in the same manner and at the same time that the directory is delivered to Ameritech's retail subscribers. The compensation for those services is a matter between the CLEC and the publisher and therefore Ameritech Wisconsin does not recover any costs. AW Init. Br. at 773.

639. We note that the CLECs did not address this issue in their briefs.

#### **PROPOSED CONCLUSIONS OF LAW**

640. Since Ameritech Wisconsin is not separately requesting rates for recovery of costs associated with printed directories, there is nothing for the Commission to decide here.

#### **II. Implementation issues:**

A. What is the list of elements that are to be priced in this proceeding?

#### **SYNOPSIS OF TESTIMONY**

*See generally* Palmer Direct and Ex. 23C.

#### **PROPOSED FINDINGS OF FACT**

641. Ameritech Wisconsin's Exhibit 23C sets out all of the items for which it proposes this Commission set rates. The CLECs have not identified any specific network elements (except with respect to Project Pronto) that are missing from that list. AW Reply Br. at 265.

642. There is no evidence in the record upon which this Commission could base rates for Project Pronto-related elements (*assuming, arguendo*, that they are bona fide network

644. We affirm our decision that unbundling of Project Pronto is not proper for a multitude of reasons. We thus do not set rates for Project Pronto-related “elements.” *See* AW Reply Br. at 264-65.

645. The CLECs devote most of their discussion of this question to what they admit seems like an “abstract hypothetical argument.” CLEC Br. at II.A.-2. The CLECs do not cite any examples of what they are talking about, or seek any relief that deals with the “abstract hypothetical argument” they set forth. This Commission will not issue advisory orders based on vague notions that a future series of events might (or might not) occur. AW Reply Br. at 265.

- B. What should be the procedure for incorporation of actual costs into tariff prices if tariffs are required from the OSS proceeding (6720-TI-160), or in what manner are the results of the proceeding made available to arbitration proceedings?**

#### **SYNOPSIS OF TESTIMONY**

N/A

#### **PROPOSED FINDINGS OF FACT**

646. Ameritech Wisconsin has presented comprehensive arguments in the pending OSS Docket (Docket No. 6720-TI-160) relating to the scope of this Commission’s regulatory authority to implement the local telecommunications provisions of the 1996 Act, and incorporates those by reference in this docket. *here. See Ameritech Initial OSS Brief* at 11-21; *Ameritech Reply OSS Brief* at 4-24; AW Init. Br. at 373-74.

#### **PROPOSED CONCLUSIONS OF LAW**

647. The question here is whether the results of this proceeding may be incorporated in wholesale UNE tariffs. We agree with Ameritech Wisconsin that this Commission may not

648. On a going-forward basis, the results of this proceeding will be binding on the parties and Arbitration Panels in future Section 252 interconnection agreement arbitrations. That is, to the extent that UNE rates and other matters decided in this docket are the subject of open issues in such arbitration proceedings, the Arbitration Panels are directed to impose such rates and other matters in their Arbitration Awards. AW Init. Br. at 374.



Respectfully submitted,

AMERITECH WISCONSIN

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Dated: August 29, 2001

### **CERTIFICATE OF SERVICE**

I, Michael T. Sullivan, an attorney, hereby certify that I caused a copy of Synopses of Testimony and Proposed Findings of Fact and Conclusions of Law - Public Version, to be served upon:

SEE ATTACHED SERVICE LIST

via U.S. Mail, postage prepaid, this 29<sup>th</sup> day of August, 2001.

A handwritten signature in cursive script, reading "Michael T. Sullivan", positioned above a horizontal line.

---

Michael T. Sullivan

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